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A

VIEW

OF THE

NERVOUS TEMPERAMENT;

BEING

A PRACTICAL ENQUIRY

INTO

THE INCREASING PREVALENCE, PREVENTION, AND TREATMENT OF THOSE DISEASES

COMMONLY CALLED

NERVOUS, BILIOUS, STOMACH, AND LIVER COMPLAINTS; INDIGESTION; LOW SPIRITS; GOUT, &c.

THE THIRD EDITION, WITH LARGE ADDITIONS.

BY THOMAS TROTTER, M.D.

LATE PHYSICIAN TO HIS MAJESTY'S FLEET UNDER THE COMMAND OF ADMIRAL EARL HOWE, K.G.; AND TO THE SQUADRONS COMMANDED BY ADMIRAL LORD BRIDPORT, K.B. ADMIRAL EARL ST. VINCENT, K.B. AND THE HONOURABLE ADMIRAL CORNWALLIS;
MEMBER OF THE ROYAL MEDICAL SOCIETY OF EDINBURGH; AN HONORARY MEMBER OF THE ROYAL PHYSICAL SOCIETY OF EDINBURGH, OF THE MEDICAL SOCIETY OF ABERDEEN; AND FORMERLY PHYSICIAN TO THE ROYAL HOSPITAL AT HASLAR, &c. &c.

Boundless intemperance
In Nature is a tyranny: it hath been
The untimely emptying of the happy throne,
And fall of many kings. SHAKESPEAR.

PRINTED BY EDW. WALKER, NEWCASTLE.

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1812.

PREFACE

TO THE

SECOND AND THIRD EDITIONS.

THE rapid sale of a large impression of this work having rendered another edition necessary, many important facts are now added, so as to make the history of the Nervous Constitution as full as the present state of knowledge will admit of. Since the publication of this book, I have been consulted by letter, from different parts of England, by a numerous list of nervous patients, who seem to have been much gratified by the explanation which is here given of these diseases. These persons had been in the habit of consulting medical authors; but confessed they had never met with any account of their complaints that satisfied them, till they perused this work. I can now add with great pleasure that the whole have recovered their health.

My grateful thanks are justly due to those members of the profession, in London and other large towns, who have, with a liberality and benevolence worthy of their learning and eminence, so warmly recommended this treatise, as calculated

to produce much good in families of the nervous temperament. An opinion expressed with such disinterestedness, will amply secure my labours against the cavils of the ignorant and illiberal.

Whoever is acquainted with the medical literature of the present day, will perceive, that I have used no affected language in the introduction of the words "NERVOUS TEMPERAMENT," into my title. They are given on the highest authority, as referred to in the proper place; for I am acquainted with no name in medicine, under which I would sooner take shelter than that of Dr Gregory, of Edinburgh. As marking a peculiar state of body, the term is well adapted to comprehend that variety of anomalous symptoms, which cannot well be reduced to a generic difinition. It is a fact, that I think will be generally admitted by every physician who has attended to this class of diseases, that the treatment or cure, turns almost entirely on the particular condition of the stomach, and accommodating medicine to the state of that organ. In female habits this is found to be still more the case than in males: and although it requires the most acute apprehension to detect the different traits of constitution, so as to suit the prescription to these, yet it appears to me, to reduce the practice to a very narrow compass, if the exhibition of articles of *materia medica*, is to be at all successful. The prevention, therefore, as operating with more certainty on the human body, and effecting more lasting changes, will always be kept

in view by the prudent physician; while at the same time it has the advantage of being more familiar to the capacity of the patient. In the course of my practice, an immense number of cases said to be "*diseased liver*," have been presented to me. But according to the pathology on which my general doctrine is founded, I considered nineteen out of twenty of the whole, to be nothing more than that affection of the *hepatic system*, which accompanies an irritable and weak constitution of bowels: and I think myself fully justified by the health which succeeded a treatment resting on these principles.* But, as I profess no obstinate attachment to my own opinions, I shall gladly retract my errors, when pointed out by those who are more capable of observation; and most willingly shall I embrace improvement from whatever quarter it may come. On the whole, I have great reason to be satisfied with having directed my studies to this enquiry: for what was originally written as self defence,† has in the end proved to be a Treatise on Nervous Disorders. "*There is a Providence that shapes our ends, rough hew them as we will.*"——SHAKESPEAR.

Newcastle on Tyne, March 12, 1812.

* The inquisitive reader will now find, that my doctrine of LIVER DISEASE, and the EFFECTS OF MERCURY, are supported by Dr Saunders of London, in an appendix to the last edition of his work on the Diseases of the Liver.

† Vide a Case of Gastrodynia, (Nervous Temperament) in Nos. 68 and 72, of the London Medical and Physical Journal, for 1804-5.

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DEDICATION.

TO JAMES GREGORY, M. D.

Professor of the Practice of Medicine in the University of Edinburgh, &c. &c. &c.

MY DEAR SIR,

In requesting the sanction of your name to the present Work, with honest pride I acknowledge the many and great obligations you have conferred on the profession of medicine by your estimable talents; but still more, by the manly spirit and dignified independence, with which, on all occasions, you have defended its rights, and maintained its honours. At a time when avarice is making rapid advances to narrow its benevolence, and a servile compliance with the frivolous forms of fashionable life is degrading its duties, it must be grateful to every generous mind, to behold a nobler example from the practical chair of the University of Edinburgh. And should any merit be due to the following pages, it will be derived from

the humble imitation of your zeal, integrity, and candour. Mankind have seldom been delighted with a picture of their infirmities; and the physician who warns his fellow mortals how to evade them, is liable to be considered rather as an officious adviser than a welcome monitor. But if it is true, as I have said, that nervous diseases make up two-thirds of the whole with which civilized society is infested, and are tending fast to abridge the physical strength and mental capacities of the human race, it must be the duty of some person to sound the alarm, and to announce the danger, however unprofitable the task.

The work, which I have now the honour to lay before the public, was written eighteen months ago: and though several authors have appeared on the same subject since that time, I do not find my labours anticipated. The ground which I have taken in the discussion, is in many respects new. This VIEW OF THE NERVOUS TEMPERAMENT may therefore be considered as the result of a more extensive field for experience than generally falls to the lot of every physician; for it has been acquired by attendance on some thousands of cases in both sexes, under all the varieties of rank, employment, age, situation, climate, &c.

I well remember, when I was young in the profession, no diseases puzzled me so much as those of the nervous kind. I was every day committing blunders: in vain I had recourse to books, for books could not supply the deficiency, and I was

frequently mortified with seeing my patients get worse under my treatment. Time and much experience only, were capable of correcting my errors. What first gave my practice consistency, was the careful study of the nervous temperament; to mark what were its original peculiarities; what its propensities; and by what causes its diseases were drawn forth. I am rather apt to believe, that most young men, in beginning their medical career, run great hazard of mistaking these complaints; as they only become apparent by a concourse of symptoms, that is extremely irregular and equivocal. And I have known more than one instance of nervous females having been treated for typhus fever, to the great alarm of their families, when they were labouring under debility of body and mind, widely different in nature; and attended too by men who called themselves seniors in the practice. A prevailing contagion must be badly understood, when both physician and patient become dupes of such unnecessary fears. I am, therefore, in hopes, that the method which I have taken in the following investigation, will somewhat contribute to familiarize the junior members of the profession with the genius of nervous disorders, and to guard them against mistakes in the treatment.

But I have no hesitation in thinking, that my enquiry may be useful to general readers. We meet with numbers of persons in the world, who, though obstinate in refusing advice for their own

health, are nevertheless very ready to comply with every precept that may correct the hereditary predisposition to disease in their offspring. Much of my animadversions on these disorders, is with a view to the *prevention;* and if parents and guardians will only interest themselves in the business, my trouble cannot be in vain. It is indeed a task, in the present stage of society, that well deserves the attention of every friend of his fellow-creatures, and his country. Great Britain has outstripped rival states in her commercial greatness: let us therefore endeavour to preserve that ascendancy, which is so essential to our welfare in the convulsed condition of Europe, by the only means that can do it effectually. That is, by recurring to simplicity of living and manners, so as to check the increasing prevalence of nervous disorders; which, if not restrained soon, must inevitably sap our physical strength of constitution; make us an easy conquest to our invaders; and ultimately convert us into a nation of slaves and ideots.

It has been customary with writers on these diseases, to illustrate their subject with the anatomy and physiology of the parts concerned. But I see no necessity for this in the present enquiry; and my sheets have unexpectedly swelled to a size that precludes the introduction of such matter. I must therefore refer my young readers to Dr Whytt on nervous disorders, and to the valuable volume of Dr Saunders on the liver, for what they

may not find explained in common elementary treatises of anatomy and physiology.

My plan is briefly this: a cursory view is given of the health of the savage state, in order that the contrast with civilized mankind may appear more striking. The inhabitants of a large town are next described; which may be construed into a kind of medical analysis of society: and this leads to an account of the *remote causes*, as found among refined modes of life and luxurious habits. A chapter follows on the influence which these disorders have on national character and domestic happines. The history and progress of nervous diseases, with a general doctrine, or summary of the pathology, precede the prevention and method of treatment.

On the whole there will be found little of what is called theory in this discusion: unshackled by any attachment to system, and unseduced by the love of novelty, I have endeavoured to delineate the NERVOUS TEMPERAMENT, as I have seen it in actual practice, and in a large intercourse with mankind. But in treating of a class of diseases out of the usual tract of enquiry, I am willing to confess, that many peculiarities may be observed, and some obscurities detected. I will make no apologies to my countrymen, for offering them my advice, on matters that so nearly concern their health: if the title of my book excites dislike, let them remember the perusal of it is voluntary. Nor will I insult their discernment, by any ful-

some justification of my own motives and disinterestedness: if I have acted the part of an honest man, that must answer for itself.

But, sir, should you recognize any thing in these labours worthy of the medical school of Edinburgh, I shall be greatly overpaid. And as this may be the last time I shall appear before the public as an author, gratitude compels me to thank the profession, both in this country and on the Continent, for the kind reception of my former studies, and the numerous testimonies given in their favour.

I remain, my dear SIR,

With the utmost regard,

Your most faithful humble servant,

T. TROTTER.

Newcastle on Tyne,
Nov. 8, 1806.

INTRODUCTION.

THE last century has been remarkable for the increase of a class of diseases, little known in former times, and which had but slightly engaged the study of physicians prior to that period. They have been designated, in common language, by the terms, NERVOUS; SPASMODIC; BILIOUS; INDIGESTION; STOMACH COMPLAINTS; LOW SPIRITS; VAPOURS, &c. A generic definition of them, from their protean shape and multiform appearance, is almost impracticable. They vary in every constitution, and assume in the same person, at different times of life, an inconstant assemblage of symptoms.

In another work, when cursorily treating of these diseases, I have attempted to give a general character of them, and for want of a better, I shall insert it here:—"Nervous feelings, nervous "affections, or weak nerves, though scarcely to "be resolved into technical language, or reduced "to a generic definition, are in the present day,

" terms much employed by medical people, as " well as patients; because the expression is " known to comprehend what cannot be so well " explained. An inaptitude to muscular action, " or some pain in exerting it; an irksomeness, or " dislike to attend to business and the common " affairs of life; a selfish desire of engrossing the " sympathy and attention of others to the narra- " tion of their own sufferings; with fickleness and " unsteadiness of temper, even to irrascibility; and " accompanied more or less with dyspeptic symp- " toms, are the leading characteristics of *nervous* " *disorders;* to be referred in general, to debility, " increased sensibility, or torpor, of the alimen- " tary canal." *

In the present day, this class of diseases forms by far the largest proportion of the whole, which come under the treatment of the physician.— Sydenham, at the conclusion of the seventeenth century, computed fevers to constitute two thirds of the diseases of mankind. But, at the beginning of the nineteenth century, we do not hesitate to affirm, that *nervous disorders* have now taken the place of fevers, and may be justly reckoned two thirds of the whole, with which civilized society is afflicted. Dr Cheyne who wrote about the year 1733, in his work entitled the "*English Malady*," makes nervous disorders almost one third of the complaints of people of condition in England:

* Medicina Nautica. Vol. iii, Spasmodic Affections.

from which we are led to believe, they were then little known among the inferior orders. But from causes, to be hereafter investigated, we shall find, that nervous ailments are no longer confined to the higher ranks in life, but rapidly extending to the poorer classes. In this neighbourhood, as far as I am able to judge from my own experience, they are by no means limited to the rich: and it affords a melancholy picture of the health of the community, to observe this proportion so very large. It is probable the other countries of Europe do not exhibit such general examples of these diseases; as many of their causes are to be traced to the peculiar situation of Britain; its insular varieties of climate and atmosphere; its political institutions and free government; and above every thing, its vast wealth, so diffused among all ranks of people.

A

VIEW

OF THE

NERVOUS TEMPERAMENT,

&c. &c. &c.

CHAPTER I.

The health of the savage state compared with modern times.

The savage and civilized states of man, as may be observed in the earliest accounts of history, have been marked by physical traits of character, as well as moral: and though his diseases and his vices may be smaller in number in the one condition than in the other, they have nevertheless exhibited signs and dispositions peculiar to themselves. Our rude ancestors, born

and brought up in a hut or hovel, almost naked from infancy to manhood, and constantly exposed to the weather, whether employed in agriculture, tending herds and flocks, or the more laborious pursuits of hunting and fishing, had few bodily disorders. Death, under such modes of living, is to be considered as the decay of nature: some may fall by war, and a few by accidents; but none are brought to the grave by excess or debauch. It is notorious that all the savage tribes of the new continent, when compared with European manners, are observed to be chaste, temperate, and abstemious.* Tacitus, speaking of the manners of the Germans in his days, describes the convivial assemblies of that people, where drinking fermented liquors was carried to the most ferocious degree of ebriety; but no where does he mention their diseases as having sprung from this cause. The favourite beverage among them seems to have been beer, which when duly prepared, is a wholesome drink. But their manner of living must

* The inhabitants of some of the South Sea Islands are examples to the contrary.

in a great measure have counteracted the effects of intoxication: such as the robust exercises, and their simple food, "consisting of wild apples, fresh venison, curds and cream," and the like, none of which were calculated to oppress the stomach and hurt digestion, as we observe among full livers in modern times. Indeed it is to be remarked every where, how much longer the laborious porter and drayman, who get often drunk, will continue their career, than the less-exercised gentleman: a proof that labour, by invigorating and hardening the body, makes it resist even the effects of debauch. How soon would the morning dram of a Billingsgate fish-wife, destroy one of our high bred women of fashion?

The virtue of chastity was general among the Germans: matrimony, it is said, was severely kept; and the intercourse of the sexes, before the body was full-grown, was strictly prevented. Here was one of the strongest securities of health; as a contrary practice in this age, is one of the great causes of bodily decay. We are also told, that the large limbs and muscular form of the parents, were expressed in the shape of the children. Another proof of bodily

health was, that every mother was able to nurse her own child; the opposite to this parental office, is one of the lamentable failings of modern constitutions. It was part of the matrimonial contract, for the wife to share with the husband his labours and dangers, and to be his companion in peace and war. This custom, of course, prevented all the evils of a sedentary life. In a country that held the marriage vow so sacred, adultery was seldom found; and it was considered in so heinous a light, that neither beauty nor wealth could ever find the adulteress another spouse. Such was the healthful system of manners practised in the woods of Germany, which were the cradle of those laws that now govern this land of freedom.

The feudal system, which succeeded to the age which Tacitus describes, and which spread over Europe, was highly favourable to vigour of body, and by consequence to health. The women were then accustomed to attend their husbands to the field, and to remain in sight of the battle; not only with a view to load them with praises and caresses at the conclusion; but to remind them of the protection due to wives

and children. Courage and valour, with such incentives would become invincible. All the pastimes and tournaments of those days, were only kinds of palæstræ for exercising the body, so as to enure it to martial fatigues. The females were constant spectators of these tilts and feats, and their presence did not fail to animate the brave; and it was the province of the fair to reward the victor, and confer the prize on the successful candidate. Now in the woods of Germany, where mothers of families shared with their husbands all the toils and privations of the field, such complaints as *bilious and nervous*, must have been unknown, because all the causes which render them prevalent in this age, did not then exist. They are the progeny of wealth, luxury, indolence, and intemperance, as they now appear.

In the eighteenth chapter of Genesis, we meet with some fine proofs of the simplicity of living among the patriarchs, which may be called the earliest stage of civilized society. When Abraham entertained the three angels in the plains of Mamre, he hastened to welcome them with all the tokens of a kind hospitality. Sarah his wife

kneaded three measures of fine meal into cakes, and baked them upon the hearth. Abraham himself went to the herd, and fetched a calf tender and good, and gave it unto a young man to dress it. And he took butter and milk, and the calf which he had dressed, and set it before them, and they did eat: and he stood by under a tree, as if to watch when they wanted any thing. Again, when Lot entertained two angels, it is said, he made a feast, and baked unleavened bread. These banquets for angels, so simply detailed in holy writ, would be considered poor fare for the epicures and gluttons of our times, who dine at a Lord Mayor's feast, if we are to judge from the list of dainties, just published, of one of these entertainments. We are farther told, in the sacred volume, that Boaz invited Ruth to come at meal time, and eat bread, and dip her morsel in the vinegar with the reapers; and he reached her parched corn to eat. Our present labourers in the harvest would be sadly pinched with hunger before they would content themselves with such simple fare. In the Iliad and Odyssey of Homer, we meet every where accounts of the like simplicity of

food and manners. When the foreign ambassadors came to treat with the Roman consul Dentatus, they found him at his farm dressing turnips: a species of amusement and economy that does not enter the budget of British statesmen. Where the earth is thinly peopled, and when commerce has made no progress, mankind live chiefly in families: and their habits and employments uniformly inculcate temperance and sobriety. Society and population must be far advanced, before luxurious living, and vicious customs, attain such growth as to enervate the human frame.

The *nervous system*, that organ of sensation, amidst the untutored and illiterate inhabitants of a forest, could receive none of those fine impressions, which, however they may polish the mind and enlarge its capacities, never fail to induce a delicacy of feeling, that disposes alike to more acute pain, as to more exquisite pleasure. The timid dispositions are apt to increase in proportion to delicacy of feeling and debility of frame. We see the truth of this fully exemplified, as we recede from the country to the town; from the occupation of the husbandman and farmer, to that of

the artisan and manufacturer; and from the rustic exposed to all the vicissitudes of weather and season, to the recluse life of the citizen. The physician, of a cultivated understanding, who knows how to appreciate the resources of his art, in approaching the sick bed of any of these persons, would endeavour to investigate the marks and dispositions of body and mind, that give the peculiar cast of character to each, before he would attempt to prescribe for their diseases. He would not confound the complaint of the slim soft-fibred man-milliner with that of the firm and brawny ploughman; nor would he mistake the nervous cramp of the delicate lady, for the inflammatory pleurisy of a nut-brown country girl. If both expressed pain in the same spot or organ, he would, in consideration of original temperament, along with the concourse of symptoms, resolve into first principles what belonged to each constitution; and thus analyze the morbid phenomena, so as to give a degree of certainty to his indications of cure, and a decision to his practice, that would insure success, if the disease was at all remediable.

As the human being, in a state of progressive improvement and civilization, quits his earthen-floored, straw-clad cottage on the skirts of the forest, or a creek of the ocean, where his time had been spent in hunting and fishing, for the town, where he is to turn himself to trade and manufacture, he necessarily undergoes a prodigious change of circumstances. He forsakes a mode of life that had been presented to him by nature; and in adopting a new situation he becomes the creature of art. When occupied in hunting and fishing for support, exposure to the external air in winter and summer, gradually endued him with such hardihood and torpor, as to make him proof against the extremes of either cold or heat. His diet, well suited for the purposes of nourishment, was sufficiently palatable, without any of those adventitious luxuries which cookery supplies. His blood and juices were not, therefore, inflamed or vitiated by highly-seasoned dainties; and his sentient system, while it was fully excited for all the movements of vital energy, was never raised to excess by inordinate stimulation. By spending so large a portion of the day out

of doors, he enjoyed the full benefit of a pure and unpolluted atmosphere. The muscular parts of the body becoming thus firm and flexile from constant exercise, all his motions are performed with strength, ease, and agility. His walk is marked by stability, and his running by swiftness. Having few avocations to engage his attention, he soon acquires uncommon dexterity in all his gestures and actions. He ascends the mountain and precipice, or climbs the tree and rock, with equal safety and speed: the arrow from his bow is discharged with force, and sure of its mark: the dart and the javelin are alike unerring in his hands. He manages his hook and tackle, as well as his skiff, with surprising knowledge and address; and in the various attitudes of swimming, he is accomplished, graceful, and unrivalled. Though in his domestic transactions, he performs all the relative duties of husband, father, and son, he seems exempted from the turmoils and cares which these connections necessarily bring with them in civilized society. The child is early instructed to follow and imitate his parent in the sports and toils of the field, and soon learns

to earn his own subsistence. No painful emotions for his success in a busy world, harass or perplex the minds of the father and mother, for it does not depend on uncertain patronage or capricious friendships. But the young savage considers it a part of his filial engagements to share his board with his parents, when age and infirmity have unfitted them for labour. His passion for the sex is temperate, because it meets with no refined allurements, from dress, manners, or fashion, to inflame it beyond bounds. Tacitus, speaking of the manners of the Germans, says, "They behave themselves with the strictest modesty, being debauched with no alluring objects, with no provocatives in banqueting." Revenge seems the only passion carried to extremes, to be attributed chiefly to a solitary life. When the savage makes love, he is almost sure of a return: he is neither perplexed with doubts nor fears, nor tantalized by false hopes and promises. The damsel of the forest is a stranger to those airs and duplicities of the coquet and the prude, which characterise some of the sisterhood in every great town. Hence the uncivilized being is free from all those

mental disquietudes, as well as bodily ailments, which are frequently brought on in both sexes, by disappointed love, and an ill-requited passion. Thus health and vigor of body, with insensibility or passive content of mind, are the inheritance of the untutored savage; and if his enjoyments are limited, his cares, his pains, and his diseases, are also few.

If then it be certain that the rude conditions of society furnish mankind with a hardihood of frame, that is susceptible of few diseases; let us examine man in the polished circle of life, occupied by pleasure, or busy in trade and manufacture. His modes of living are in every respect the reverse of the savage state: his body and mind are enervated by debilitating powers, that render him unfit for labour or great privations; and his diseases acquire a more diversified train of phenomena. The husbandman, in point of constitution, may be considered as a medium between the two extremes. By his active occupation, his labour, and exposure in the external air, he partakes of the strength of the barbarian; and a corresponding tone is given to his nervous system: his mind is not de-

bauched by effeminacy; while his temperance and moderation secure him against the disorders which prevail in fashionable life.

But as we pursue our enquiry among the inhabitants of large cities, we shall observe mankind divided into an immense variety of persons; all distinct by fortune, by business, and modes of living; and again, all these greatly influenced by original constitution and education. Among rustics, and still more among savages, there is an universal sameness of character. For as the ambition or ingenuity of man finds out for him new employments; these, while they draw forth latent talents, call forth also new passions and desires: so that however much he may be styled the *creature of habit*, he is in many respects the *creator* of his own *temperament*. The Indian paddling in his canoe; or the Norwegian sculling his skiff, remain unchanged in their manners; because they return at night to their family, and to intercourse with their kindred. But embark man at an early age in a large ship, such as an East or West Indiaman, to traverse the deep as a navigator and seaman, and you soon find that he changes to a dif-

ferent species of being, and exhibits traits of a profession, of the most singular kind, which differ from all others.* This new occupation while it distinguishes him from all the world beside, in gesture, manner, and address, bestows also a new disposition on his morbid state. His diseases, therefore, show a particular genius and feature, such as are found only among his own class, and which spring from causes peculiar to the sea life, as scurvy, &c.

It has been remarked by some acute political arithmeticians, particularly the famous Gregory King, that the marriages in London and other great towns, produce fewer children than those in the country. The reasons for this difference are very obvious: he gives examples of the fact, and then enumerates the causes, which are the following:†

* Compare the character which I have drawn of the British seaman, in my preliminary discourse in the first volume of MEDICINA NAUTICA, with the Indian in Robertson's or Raynal's History of America; or with the Bond-street Lounger, as pourtrayed in any modern comedy or novel.

† See his Political Conclusions, printed in Chambers's Estimate.

1. The more frequent fornications and adulteries.

2. A greater luxury and intemperance.

3. Greater intenseness to business.

4. Unhealthfulness of the coal smoke.

(He ought to have added, impure air, from hot and crowded rooms.)

5. Greater inequality of age between husbands and wives.

All these causes, beside many others, still hold good in the present times. His first and fifth reasons require some explanation, which can be done best at this part of my work. It will be allowed on all hands, to be the intention of nature, that years nearly equal should be joined in marriage: and were mankind left to themselves this would be the case. But art and fashion have become dictators to matrimony, in this venal age. The young man of the present day, must begin the world for himself; and like a knight errant in romance, must fight his way to a fortune, before he dares to take a wife. It is too often the case, that the sordid parent winks at the son's indiscretions with the sex, rather than consent that he should marry the woman he loves, without a rich dower. And

while by this growing custom, a certain number of defenceless females are doomed to all the horrors of prostitution, in order to gratify the passions of the young, and the avarice of the old, it is one grand step to the degeneracy of the species. It is thus the best years of manhood pass away before marriage is thought of: it then becomes a convenience more than an equal attachment of the parties; and hence we frequently observe a difference of thirty years and upwards, when the lady may be said to be rather the mistress, than the wife of her husband. Amidst these unnatural unions, it is pleasing to mention some exceptions. Many of the old noble families of the nation, have within these few years, married at the prime of life. And it is to be remarked, that these marriages have all been noted for happiness and reciprocal affection: the men being all distinguished by worth and sobriety; as the ladies are by their virtues, accomplishments and beauty.

When Gregory King made his observations, about the year 1696, London contained little more than one half the inhabitants it does at this day. Other great

towns throughout the kingdom, have increased in like proportion. Now if such effects followed the city and town life in those times, how much greater must they be in the present. Certain it is, the physician of the seventeenth century, had not the multitude of *nervous cases* to treat, which now occupy the profession. It is probable also, as far as experience goes, that the proportion of marriages, without children, and the number of miscarriages in married life, are greatly increased; and these are chiefly confined to the town lady, or at least to people of better condition. It was a remark of the sagacious King, that the system of agriculture in his days, was advancing to diminish the number of cottagers; but to increase the village, and still more the town. If such was the case a hundred years ago, how much more reason must there be now for the observation, when it is notorious, that some overgrown farmers possess capitals of twenty or thirty thousand pounds; and engross lands that formerly supported twenty or thirty families! The middling class of countrymen are, by this practice, annihilated, forced to betake themselves to trade, and there

is no degree of rank left between the affluent farmer and his menial servants: thus,

> ——— a bold peasantry their country's pride,
> When once destroy'd can never be supplied.
>
> GOLDSMITH.

The lying-in state exhibits some of the great disadvantages of refined life. To the delicate, well-bred woman, it is always attended with danger; and the diseases which immediately follow, even a fortunate delivery, are often fatal. The rude conditions are exempted from all these. The nervous system rendered strong and resisting, surmounts the various changes and evolutions of the birth, and subsequent lactation, without being much harassed or weakened in the struggle. Bountiful nature, unfettered in her operations, and left to herself, easily accomplishes her purpose. The robust rustic therefore attends her husband in the field in a few days; while the genteel lady is stretched on her couch, often a prey to some nervous affection, but always slow in convalescence.

Again, the wives of the countryman and savage seldom fail in being mothers of a

numerous offspring. But sterility, or what is next to it, premature birth, are common evils in towns and cities. Ninety-nine cases of abortion, out of the hundred, may be imputed to a relaxed nervous frame; either from hereditary debility, an improper education in childhood, or other causes that are known to weaken the nervous system. Does not every woman know how quickly frights and alarms bring on miscarriages? In a vigorous constitution, accompanied with a healthful set of nerves, such causes can do no harm; but where the sensibility trembles at every breath, the state of pregnancy is attended with constant terror and dread.

CHAPTER II.

The medical description of the inhabitants of a town or city; being an analysis of society.

In order to bring detached facts into a general view, I shall divide the inhabitants of a large town into the following classes, and give a concise history of each, so far as it may be necessary to shew how business, customs, and manners, influence health.

Class 1. Literary men.
2. Men of business.
3. The idle and dissipated.
4. The artificer and manufacturer.
5. Those employed in drudgery.
6. Persons returned from the colonies.
7. The female sex, consisting of the higher, middling, and lower orders of women.

1. Literary men. The philosopher and man of letters, who devote most of their

time to study, must lead a sedentary life. The person who thinks and reflects much, must retire; and retirement necessarily abstracts from exercise and amusement. To be shut up in a close room, little exposed to a free and pure air out of doors, soon induces a sallowness of countenance; and as want of exercise accompanies this confinement, the muscular power is diminished, the fleshy parts grow soft and flabby, and general debility is the consequence. Few men attached to literary pursuits are active, strong, and athletic: as if study was incompatible with bodily exertion, the gesture of a thoughtful man is always solemn; and his pace and motions are measured and uniform when he walks abroad. The posture of the body in a studious man at his desk, is unfavourable to health. The lungs are seldom expanded by full inspiration; and while the bronchial cells are not duly stimulated by the powerful influx of an oxygenized atmosphere, the whole pulmonary organs lose their vigour, and the blood that floridity which is necessary for vital energy and a glowing complexion. All the secretions, and their excretories, fall into inaction from want of

muscular motion. By little recreation, and no change of objects to relieve the attention, the whole nervous system sinks into listlessness and inactivity. The mind itself, by pursuing one train of thought, and poring too long over the same subject, becomes torpid to external agents: and an undue mental exertion seems to subtract from the body much of that stimulation which is required for many operations in the animal economy, particularly what belongs to emotion and passion. The powers of digestion, with all the viscera subservient to them, partake in a particular manner of this derangement, and grow unequal to their office. The debility and inactivity which take place in the chylopoetic organs, re-act on the nervous part of the frame; and the faculties of intellect, as sympathizing in a great degree, with all these highly sensible bowels, are influenced by the general disorder. Hence the numerous instances of dyspepsia, hypochondriasis and melancholia, in the literary character.

But it is to be supposed, that all men who possess genius, and those mental qualifications which prompt them to literary

attainments and pursuits, are endued by nature with more than usual sensibility of nervous system. And there are moral causes to which they are exposed beyond others, that may have a large share in the production of their indispositions. The man who studies and writes for his bread, often depends on a precarious subsistence; sometimes the cold charity of an insolent bookseller: a mind of fine feeling, under the pressure of these circumstances, must frequently undergo the most poignant sufferings. Such seem to be the chief causes which give a decided character to the predisposition and diseases of literary men. To this class properly belong all the learned professions; and all those who cultivate the fine arts, either for a livelihood or amusement.

2. Men of business. The subjects of this class are very numerous in all our great towns. It includes all those engaged in trade: many of them, no doubt, have much active bodily exercise; but that part of them confined to the counting-house and shop, cannot be said to enjoy the advantages of air and activity, as requisite for vigour of body. The posture of

leaning over a desk, contracts the motion of the lungs, and impedes the functions of the stomach. These persons are commonly pale and sallow, soft-fibred, and of a slender make. Not a few of them behind the counter, approach in external form towards the female constitution; and they seem to borrow from their fair customers an effeminacy of manners, and a smallness of voice, that sometimes make their sex doubtful. Such degeneracies in corporeal structure, cannot fail of engendering a predisposition to diseases of the nervous kind. It is surprising to see and hear with what address and loquacity some of these *little beings* in London, set off their wares; as if there were a necessity for a vender of silk and muslin to be as soft as the commodity he deals in. You will perceive them to wheedle the buyers of goods out of their money, by a kind of fascination. Yet it has often been matter of wonder to me, how a lady of spirit can listen to the prattle of these manikins, without disgust; more especially when it is considered that they have supplanted the sex in an employment which is their birth-right, and are devouring that bread which belongs to thousands of poor

women, who are thereby consigned to a life of drudgery, if not of wretchedness.

But the man of business, in this commercial age, is not always to be estimated a correct liver: luxury follows hard upon gain. However punctually the ledger may be kept in the fore part of the day, the tavern too often has its share of the evening. The person who has any thing to sell, very naturally praises the quality of his goods; and as he has daily to dispose of the like assortment, he soon acquires a kind of phraseology and eloquence in making a bargain. This sort of conversation is always enlivened by something to drink: the vender knows well how liquor dilates the heart, so that if he can persuade his customer to drink a bottle of wine, he is almost sure of getting his price. This is what makes the trading town so full of taverns: hence those frequent instances of nervous and bilious complaints which follow habitual inebriation, to be daily met with in medical practice.

Mankind when in pursuit of money, do not give themselves much trouble about intellectual attainments. The man of business however fortunate he may have been

in the acquisition of wealth, is therefore little fitted to enjoy retirement; for riches do not bring content. When he comes to retire he is of all men the least satisfied; for his easy circumstances become the root of all his evils; and from having no longer any motive for action, he falls a certain prey to low spirits. These are the persons in this age, when riches are so generally diffused, that make up the bulk of hypochondriacs in this country. So certain it is, that happiness in this state of being, rather consists in the pursuit, than in the possession of our object.

All those employed in the public offices of government, and in the houses of trading companies and banks, come within this class: they are all distinguished by a sedentary method of life within doors; and when they pass the middle age, are often troubled with indigestion and low spirits.

3. The idle and dissipated. This is also a numerous class in every great town. These persons are the subjects of diseases which originate chiefly from excess and debauch; and are not unfrequently spectacles of misery the most humiliating to human nature. Such disorders appear

especially in the prime of life; often in early youth; and if they are not fatal before forty, they introduce premature senility, decrepitude and fatuity. A large city or town may be truly called a hot-bed for the passions: all the vices that more particularly enervate the constitution and injure health, can be there practised long without suspicion or restraint, and indulged to the utmost: thus the young and inexperienced are quickly initiated into every fashionable folly, and a vortex of dissipation. The sexual appetite is prematurely excited by the numerous hordes of unfortunate women that are permitted to range the streets. The powers of procreation are thus weakened beyond recovery, before the body has acquired its full stability and growth; and the vigor of constitution as well as the faculties of mind are shook to the very centre. When such debilitated beings have progeny, the sins of the father are visited upon the children, and they appear a race of invalids from their birth. The employment of males, as servants within doors, to do what might be better done by women, is one great means of enervating a large proportion of the commu-

nity. Young countrymen are often brought into genteel families to fill these unmanly occupations. They quickly degenerate in looks and strength. They are taught to dress like dolls or puppets, to please the fancies of their fashionable masters and mistresses, whose squeamish tastes would sicken at any thing robust coming near them. These footmen or lacqueys, are also exposed to the temptation of high living and drunkenness, and soon forget the simplicity of country fare and innocent manners. At a time when strong and athletic warriors are required to fight the battles of the nation, it is a vile spirit in high life that encourages such degeneracy among men in the lower orders, and leaves the sex a prey to want, or to seek their bread in a brothel.

But as there is a disease the peculiar scourge of unlawful embraces, so its effects on health are equally disgusting and dangerous. The inconsiderate young man who contracts this complaint, from delicacy often conceals his misfortune till it has gained a degree of virulence not to be described. This distress is frequently aggravated by mental sensibility; and fami-

lies and connexions are at once involved in general calamity. In the advanced stage, hideous deformity of body is often the consequence; but in all the gradations of this infection, a long and rigorous course of mercury is the only remedy to be depended on. Mercury, rendered antivenereal and poisonous by oxydation with the different acids, is considered a certain cure for syphilis; but its exhibition is sometimes fatal to the constitution, and constantly leaves behind it a weakened frame of nerves, and a disposition of stomach and bowels liable to spasmodic affections.

All full livers and drunkards come within this class. Frequent surfeits from high-seasoned food; and frequent intoxication from vinous or spiritous potations, commit dreadful ravages on the body and mind. It is a misfortune in polished society, that many indulge in these excesses without thinking they are doing wrong; and often sink into the grave by diseases of their own creating, without being warned of their misconduct. The disgusting propensity to luxurious eating fortunately is seldom the case with the fair sex; but where it happens, a train of nervous and

bilious complaints are more certainly the consequence. To devour a large quantity of food is only a bad habit; most persons could be nourished with half what they feed on; so that not only temperance as to quality, but abstemiousness as to quantity, is one of the golden rules of health.

4. The artificer and manufacturer. The numbers of this class are daily increasing; the natural effect of the vast commercial wealth of the united kingdoms. The artisan and manufacturer are not confined to the town; for almost every village throughout the country possesses some branch of manufacture. Here again all the effects of a sedentary life appear,—the uneasy posture and unwholesome air. But many species of manufacture are unhealthful from noxious metallic fumes, to which the workmen are exposed, such as those of mercury, lead, copper, &c. The exhausting heats of furnaces, smelting houses, laboratories, ovens, boilers, &c. in different kinds of employments, have their diseases; but the most noxious are those which fix on the nervous system. Those trades also, where the articles wrought give out considerable quantities of unrespirable gases,

from the decomposition of animal and vegetable matter, are insalubrious; the workmen commonly look pale, sallow, and dejected.

Such persons as are exposed to the heat of large fires in their labour, and undergo sudden changes of temperature, cannot fail of being soon exhausted in constitution. As far as I have obtained information, it does not appear they live long. Their profuse perspirations, induced by hard work, as well as by great heats, give most of them a propensity to drinking. Were they always to quench their thirst by water only, the excessive labour might be borne for a length of time; but the strongest malt liquors, often mixed with spirits, are the common drinks of men employed near fires.

But I have also met with many severe stomach complaints among forge-men, where there could be no suspicion of irregular living. Twenty of this kind occurred in the neighbourhood of Newcastle in the last three years, and some of the number proved fatal. The standing posture, when long continued, is very hurtful to

the bowels, as often happens among blacksmiths.

I do not find that the pitmen in the coal-mines in this district are liable to any particular diseases; when temperate in drinking, they commonly live to a great age.

5. Those employed in drudgery. This class is composed of both sexes; they grow strong and broad-shouldered from labour, provided it is chiefly out of doors. But in this class we often observe many addicted to drunkenness; and I much doubt if their work is ever so severe as to injure health, when they are regular livers.

In the town where I now live, it is the custom for women of all ages to do much of the drudgery, which in other places, is done by men. Nothing appears so disgusting in the eyes of strangers, as to see a woman carrying a quarter of beef, or two carcases of mutton, to market; or serving bricklayers on the top of a house, while young men are employed in female business within doors.

It may however be considered as a fact, substantiated by the daily experience of physicians, that all the diseases which are

caused by hard labour, poverty, and want, are much easier of cure, than those which arise from indolence, luxury, and debauch. A constitution that has been weakened by subtraction of nourishment, may soon have its energies restored by suitable regimen, diet, and medicine: but the frame that has been wasted of its vital powers, by excessive stimuli and debilitating pleasures, has seldom or never been brought to its former strength.

6. Persons returned from the colonies. It is very common in the present times, for men brought up to business, to spend a number of years in the colonies, till they are able to return with fortunes. They may therefore be considered as a distinct class, in this enquiry. These persons bring with them to Britain, indelible marks of the effect of the climates they have lived in: dyspeptic complaints, and all their nervous accompaniments, are the never-failing diseases of this enervated people. The tropical heat, and luxurious modes of living, are chiefly to be blamed in the production of such bilious and nervous ailments; and they have usually taken so deep a root in the constitution, that they

are rather aggravated than relieved by our variable atmosphere. The foggy weather, and fickle temperature of Britain, keep the feeble nerves of these relaxed frames in a state of constant irritation.

The diseases of tropical climates, but particularly the fevers of some countries, weaken the nervous system, produce great mobility, and a disposition to spasmodic complaints. Hence the chylopoeitic viscera, but particularly the liver, become the seat of so many painful affections; and the word *bilious*, has grown a theme of constant conversation in England, as well as in the colonies.

7. The female sex. Nature has endued the female constitution with greater delicacy and sensibility than the male, as destined for a different occupation in life. But fashionable manners have shamefully mistaken the purposes of nature; and the modern system of education, for the fair sex, has been to refine on this tenderness of frame, and to induce a debility of body, from the cradle upwards, so as to make feeble woman rather a subject for medical disquisition, than the healthful companion of our cares. The medical literature of the present day, affords abundant, but me-

lancholy proofs of the justness of this remark. Their whole tenor of living, and domestic economy, are at variance with health. The female infant before she can well crawl along the floor, is taught some employment that will encourage her to sit, to stoop, or to walk two-fold. That it should be rude for an innocent young girl to run about with her brother, to partake of his sports, and to exercise herself with equal freedom, is a maxim only worthy of some insipid gossip, who has the emolument of the family physician and apothecary solely in view. A man of fortune and wealth, when he builds a stable or a dog-kennel for his horses or hounds, takes care that these companions of his field-sports shall be duly preserved sound in wind and limb, by frequent exercise out of doors, when he does not hunt. But in no part of his premises do you see a gymnasium for his children. If the ingenious arts are chiefly to be valued as they increase the sum of human happiness, we thus make it a misfortune to have a house over our heads, though it may shelter us from the frost, the tempest, and the rain; for it too often becomes the means of de-

priving us of health, when it prevents exercise and excludes pure air. But we indulge our boys to yoke their go-carts, and to ride on long rods, while little miss must have her more delicate limbs crampt by sitting the whole day dressing a doll. Ancient custom has been pleaded in favour of these amusements for boys, as we read in Horace: but it is no where recorded that the infancy of Portia, Arria, and Agrippina was spent in fitting clothes for a joint baby.

All female employments that are performed in the sitting posture, injure health; and are hurtful in proportion to the early age in which they are begun. Few of the sex are entirely free from this habit.

Women of very moderate fortune, and the wives and daughters of all reputable tradesmen in this country, may be said to indulge in most of the follies of their superiors. They can have their hot close rooms, drink strong hyson, and keep late hours, as well as a dutchess. The female constitution, therefore, furnished by nature with peculiar delicacy and feeling, soft in its muscular fibre, and easily acted upon by stimuli, has all its native tender-

ness increased by artificial refinements. Hence the diseases of which we now treat, are in a manner the inheritance of the fair sex: when to these we superadd all the preposterous customs of fashionable life, need we wonder at the numerous instances of bad health and feeble existence, so often to be met with among them.

One of the curses which was pronounced against some of the Jewish mothers, is unfortunately realized among many of our fair countrywomen. "*The tender and de-* "*licate woman among you, which would* "*not venture to set the sole of her foot up-* "*on the ground, for delicateness and ten-* "*derness, her eye shall be evil towards the* "*husband of her bosom, and towards her* "*son, and towards her daughter.*" *

No text in scripture, or any other book, ever conveyed a more just censure on the indiscreet conduct of a parent to the offspring. From having injured her own frame by refinements in living, the mother thus sows the seeds of disease in the constitutions of her children: hence a weak body, delicate nerves, and their conse-

* Deuteronomy, chap. xxxviii. v. 56.

quence, a sickly existence, become hereditary. Such may be here called a fair interpretation of those emphatic expressions, "*Her eye shall be evil towards the* "*husband of her bosom, and towards her* "*son, and towards her daughter!*"

CHAPTER III.

Remote causes of nervous diseases, &c.

The remote causes of nervous diseases are chiefly to be sought for in populous towns; and increase in proportion to the deviation from simplicity of living. The state of civilized mankind is thus exposed to causes of bad health, which have no power among rude nations, viz.: In

1. Air.
2. Exercise.
3. Food.
4. Cloathing.
5. Passions of the mind.
6. Intense study.
7. Lactation.
8. Miscarriages and premature labours, &c.
9. Climate.
10. Medicine.

1. Air. A pure atmosphere is of the first importance to sustain animal life in

full health and perfection. Mankind in the earliest ages of the world must have soon learned this. Although they had no knowledge of either the chemical qualities or the mechanical properties of common air, some particular deviation from the usual standard, was reckoned the chief cause of epidemic fevers. The senses in a great measure were the best tests of a tainted atmosphere, especially that of smell: and where large collections of animal and vegetable filth were found in a state of corruption, offensive effluvia would be quickly detected, and would be avoided. But a more correct method of judging of the medium in which we breathe is now obtained from chemical philosophy; for independent of any noxious substance which may impregnate the atmosphere, as arising from the decomposition of animal or vegetable matter, or other sources, it is liable to become noxious to life, by whatever means the *oxygen* or respirable portion is destroyed, lessened, or abstracted. Such is the case when a number of persons are confined in a small place; or where large fires are kept, and the doors and windows made too close. It is thus the city or populous

town is rendered less salubrious than the country. Narrow lanes, high buildings and houses, filthy kennels, small apartments, huge warehouses, manufacturing establishments, cellars under ground, consumption of fuel, and a large population, are so many sources whence the air is contaminated. The sun-shine scarcely beams on any window of a house in town: the ventilation of the upper parts of the building is imperfect; but the lower stories, particularly what is under ground, can receive no pure portion at all. The business of the whole inhabitants almost confines them within doors; so that the very complexion and countenance discover a citizen. It is familiar to people bred in great towns, to remark, how imperfectly all the trees and shrubs grow in their little gardens. Nothing but the foul atmosphere is to be blamed for this; for the richest soil cannot correct or prevent such rickety productions. Animal growth labours under the same disadvantages as the vegetable tribe. A deficiency of colour, in old times, suggested to physicians the predominance of some humour in the body: and from this cause particular names of temperament

were assigned to different people. But we now impute a delicate look, and a pale face, to confinement within doors, and to breathing an impure air. That portion of the atmosphere which tinges the skin with a lively hue, and the blood with a florid colour, is known to be oxygen. Yet so unnatural and perverted are fashionable opinions on this subject, that a blooming complexion is thought to indicate low life and vulgarity in breeding. What a depraved mode of thinking! What a false standard for beauty; to prefer a sickly sallow hue of the countenance to the roses of health! And yet seek to imitate them by artificial means. This wan and pallid complexion, or negation of colour, is always an indication of debility, and usually accompanies bad health, from whatever cause, but chiefly imperfect action of the digestive powers. The functions of respiration and digestion have therefore some dependence on one another. Some persons give the name of *bilious* to these sallow looks: but they certainly often appear where there is no suffusion of bile; and in this stage are to be imputed to deficient oxygenizement of the blood.

But it is the known effect of the oxygenous principle of the atmosphere, when duly inhaled from a current breeze, not only to saturate the blood with floridity, but to exhilirate the spirits in a high degree; invigorate and redden the muscular fibre; bestow energy on every nerve, and call forth at once mental and corporeal strength. Most persons must have taken notice of that languor, drowsiness, and dislike to motion, which are felt in a close, warm, and crowded room. Instances have come within our own observation, where the candles scarcely seemed to burn, and where one half of the company was yawning at the other, without knowing the cause. Should any philosopher, who might pity the somnolency of the party, attempt to open a sash by way of correcting the air, his politeness would be apt to give offence. What effect the popular lectures of Mr Davy, and those delivered in provincial towns, may have on such assemblies, time only can shew. A modern rout is certainly one of the completest examples of a warm crouded house. The good lady, who entertains for the evening, commonly thinks herself honoured in proportion to the num-

ber of visitors; and the guests find themselves supplied with every elegance, except a pure cool zephyr. The warm full theatre, or dancing assembly, if not duly perflated, like the rout, are so many marts of bad health.* Impure air saps the constitution by slow approaches; but no miner more certainly carries his point at last. I hope Mr Davy † is duly attended by all those matrons who keep boarding schools for young ladies, in and near London.

One of the great misfortunes which some species of manufacture have brought on this country, is the employment of children, before the body has attained its full growth. During infancy and childhood, and till the human frame has acquired its full stature, it would appear, that more pure air is required for the purposes of health than at a remoter period of life. The heart of the child much surpasses that

* Persons who are fond of frequenting those unwholesome crowds ought to be informed that nothing is so indelicate as to breathe *respired air*. To drink of the same cup is the height of politeness compared with this custom.

† Lecturer on Chemistry, at the New Institution, and highly celebrated for his discoveries in the science.

of the adult in the frequency of its pulsations; and every movement of the body is more constant and quicker, so that it seems to be never at rest, but during sleep. Hence the greater expenditure of vital air. The child who is early employed in a woollen or cotton manufactory, is to the village plough-boy, what the town-lady is to the country girl. They are both examples of nature's precepts being disobeyed: for to be stewed in foul air, is the same in effect, wherever it happens.

A warm unventilated nursery is a nuisance of the first magnitude. Nurses and servants have too often the sole superindance of these apartments: fashionable mothers at least, as some may be justly called, seldom visit nurseries. Bad health, particularly among the delicate children, is too often brought on by a close sleeping place. It is only when the weather is extremely cold, that a fire should be permitted in these apartments; for during the sleeping state, the body is not sensible of the deficient purity of air; and it may be substracted altogether, without any struggle being observed, and without the body being waked. It is thus infants are so easi-

ly suffocated or overlaid: as the air becomes more impure the stupor increases, till respiration stops; and the child is always found in the sleeping posture.* Sleep is not only the image of death, but it seems a step towards it.

The modern practice of confining children to sleep in a crib, till they are three or four years of age, is highly commendable: it has thus all the advantages of the breast to put it to sleep, and is in no danger of being overlaid. The size of the bed afterwards should still be proportioned to the child; and they should never be permitted to lie with a grown person. The convulsions of infants, which are purely a ner-

* In 1801, while I resided at Plymouth Dock, a house adjoining, took fire, in an upper apartment of which, that had no chimney, a poor woman with eight children perished. They were all found in bed, in the *sleeping posture;* and had been suffocated, from the flame surrounding the room, and exhausting the air, for no part of them was scorched. During the alarm no person thought of this poor family, otherwise the whole of them might have been easily rescued, for only a portion of the premises was consumed. It is probable that none of them waked, as their cries would have been heard, the house being only of two low stories, and this garret room.

vous affection, we know to be often brought on by want of ventilation; and we naturally expose them at a window for recovery, as we do with a lady fainting in a crowded room.

A few years ago, the numerous deaths which happened in a foundling hospital in Dublin, made a great noise in this country. On inquiry, it was found that foul air had the chief share in this uncommon mortality. Some hospitals in Paris, about the same time, were scenes of the like destruction to infant life. Now children who survive these nurseries and hospitals, or dungeons as they may be called, are so stinted in their health, that they are unfit for every occupation that requires strength; and should they have families, hereditary debility and deformity are the lot of the offspring. Of such vast importance is pure atmospheric air to the growth and health of the human body.

The following instance of a shocking calamity, shews how necessary it is, for all descriptions of persons to be informed, that *without a constant supply of pure air, life cannot be sustained.*

In 1797–8, a small passage vessel be-

longing to Southampton, had on board *seventy* men, women, and children, coming from Jersey; among whom were many soldiers and their families. It began to blow fresh breezes, and for the safety of his sloop, the master laid the hatches over, and covered them with a tarpaulin, which he battoned down, for better security. When the vessel came within the isle of Wight, the hatches were opened, but, dreadful to be told! *the whole of the passengers were found dead!!!* The master, who did all this through ignorance of the effects of *foul air*, became mad, and died soon after.

2. Exercise. This assistant of health cannot well be said to form a part of the recreations or amusements of a great town. The inhabitants have neither been taught to wish for it, nor how to enjoy it. A formal walk before dinner to call on a few friends, or to make some purchases at a shop, bounds the travels and excursions of thousands of women in London, and other populous cities. If the streets are disagreeable to walk, or should the least fatigue be felt, the remainder of the journey is performed in a coach. The male part

of the community do not much avail themselves of greater advantages. Can a few strides to the office or counting house be deemed exercise? Or can a lounge in Bond-street be considered as a parade for masculine health? The whole business of a town-life is transacted within doors: scarcely a house in London has an area attached to it sufficient for the sports of a child, where it may stretch its limbs, and ramble about. Where there is no space out of doors appropriated for the play and diversions of children, such as running, leaping, and wrestling, a manly vigour of body can never be acquired. The stature may, no doubt, attain its common height; but can there be firmness of muscle, or energy of nerve in such a frame? Like the plant that is reared in a hot-house, it may grow tall and look fair, but the first gale of wind lays it low. The city child, like the dwarf, being denied the free motion of its limbs, is secluded from playmates of its own age, and soon imitates the manners of its seniors. It thus insensibly acquires a volubility of tongue, and fluency of speech, that appear like premature talent of mind. But this early show

of intellect, is not stable in its growth ; and such a youth seems to learn nothing after fourteen. But the child educated in the country, who has no bounds set to his walks and sports, is indifferent to study and all mental acquirements : his great flow of spirits gives him constant amusement, and his good health keeps his limbs in continual motion. The body having thus copied the dictates of nature to its full growth, will be better prepared by the soundness of its texture, for those intellectual recreations, of either elegance or utility, that are to be the future employment of life. The town and the country in this respect may be said to exchange commodities. The youth bred in the village will have the best chance for sound health and pure morals, and will find the city the best mart for these virtues. But as a vigorous corporeal structure, as well as intellectual excellence, cannot remain long in the town without degeneracy, perhaps not more than three generations ; so if these endowments are to be preserved in the same family, they are only to be recruited by resuming the habits and amusements of a country life.

Broad shoulders, a full chest, and mus-

cular limbs, are concomitants of exercise and labour; they mark what is called the *brawny form.* The limb or muscle that is often exercised and put in motion, expands from the influx of blood that is thereby directed to its vessels; which increased influx of blood distends the arteries and veins; supplies the fleshy parts with a larger proportion of nutriment, and ultimately adds bulk, firmness, and strength, to the moving fibre. During active muscular exercise there is a great expenditure of the fluids: the more aqueous and volatile are thrown off or exhaled, by sweat and insensible perspiration; while an increase of appetite to supply the wasted juices, is a necessary effect of this expenditure. The organs of digestion also gain new vigour, and perform their office with more facility and expedition: the food assimilates more readily with the other secretions, and is propelled with greater rapidity along the intestinal tube.

By competent exercise, the blood that returns to the heart from the extremities, is duly liberated of certain parts intended to be thrown off; and acquires in the lungs fresh qualities from the inspired at-

mosphere. It is probable this function of the pulmonary organs could not go on in a manner consistent with health, without some degree of agitation, such as we observe during the increased motion of the chest. It is thus exercise out of doors bestows on the countenance the animated bloom of health. The mental faculties receive a like degree of energy from active bodily motion; it shifts the train of thought from one object to another, forces new impressions on sensation, and a change of ideas is the consequence.

All the nations of antiquity, of which we read, who trusted to the art of war for safety, found it expedient to train their youth to hardy and active exercises, for the purpose of making them soldiers. The Olympic games, Gymnasium, Palæstra, Campus Martius, Circus, and Arena, were so many places appropriated to the diversions and shows of chariot-racing, horse-racing, running, wrestling, fencing, throwing the coit, &c. Without stated exhibitions of this sort, the inhabitants of large cities could not be well inured to bodily fatigue, or become athletic. It was also necessary to keep up emulation among

young men, and to grant marks of distinction to those who excelled in these achievements. Xenophon, in drawing the character of a finished general, lays great stress on the pains taken by his hero to detach his officers on hunting parties, that they might learn to bear thirst, hunger, inclement weather and danger.* He must know little of a military life, who would trust the defence of a country to a sedentary people. All the qualifications of a soldier are wanting among such persons. What drilling or training could ever fit such men to sleep with impunity on the wet turf, to bear cold, fatigue, and all the privations peculiar to actual war?

Dr Gillies, in his animated description of the Olympic games and Gymnastic exercises of the Greeks, says, "Bodily "strength and agility were accompanied "by health and vigour of constitution. "Their athletic hardiness bore without "inconvenience, the vicissitudes of cold "and heat. Even in the scorching heat "of July, (for that was the season of the "Olympic games,) they received bare-

* Cyropædia.

" headed the direct rays of the sun. And " the firm organization acquired by perpe- " tual exercise, counteracted that fatal " propensity to vicious indulgence, too " natural to their voluptuous climate, and " produced those inimitable models of " strength and beauty, which are so de- " servedly admired in the precious remains " of Grecian statuary. *There is a courage* " *depending on nerves and blood*, which " was improved to the highest pitch " among the Greeks."*

If therefore exercise tends so powerfully to strengthen the body and exalt the courage, how fatal to health must be the total privation of it? And if there is one disease more than another that is induced by indolence, by sloth, and want of active motion, it is that train of nervous weaknesses, which puts on the form of every other complaint, and becomes one of the greatest stings to human happiness.

3. Food. Luxurious living, joined to other causes, has a manifest tendency to induce nervous and bilious derangement. When a large quantity of rich food is con-

* History of Greece, chap. vi.

sumed, heightened to the palate by all the arts of cookery, more than nature demands must be taken down. A variety of dishes also invites to inordinate appetite and gluttony. The organs of digestion are thus oppressed and weakened by the surplus; the liver in particular is enlarged in its volume: the blood is charged with a richer quality, and every vessel and gland stimulated to excess. The nervous system is also preternaturally excited, and grows highly susceptible of stimulus, and easily affected in mind by pleasurable sensation. If a life of indolence is led under luxuriant diet, joined to the liberal use of fermented liquors, together they form that habit which constitutes the *voluptuary*. It is characterised by a florid complexion, sparkling eyes, an unmeaning simper, softness of flesh, and fullness of blood, rather than obesity. The mind is light, indolent, and indifferent to every thing but pleasure. A person of this description is perpetually in pursuit of some selfish indulgence; courts the acquaintance of all who keep good tables; flatters the weak part of the sisterhood, but shuns the society of sensible women; and calls philosophers insipid com-

panions, and disturbers of a party. Such a man is remarkable for a great flow of spirits at the convivial board: but his round of delights is not lasting. He that laughs and drinks with every one, grows sad in time; and early decrepitude, and nervous debility, are his certain portion. As his youth was remarkable for good health and levity of disposition, so his age is tortured by low spirits and paralytic weakness.

There are some persons of the nervous temperament, that are much addicted to high seasoned food, which I call luxurious living. This custom is often first acquired by indulging in the use of hot articles, with a view to obviate flatulence, and other dyspeptic feelings; but it insensibly gains ground, and by repetition it is confirmed into habit; and the excitability, or vital power of the stomach, is speedily exhausted and worn out. Such persons commonly die of apoplexy, after a voracious repast, or linger a while under incurable palsies of the limbs and other organs, and idiotism.

When persons, after a course of high living, are compelled to feed on a less

generous diet, we often meet with painful stomach complaints, and low spirits. In these cases the organs of digestion seem to be so much weakened by the previous excess, that poor fare is unable to stimulate them to healthful action. Under such circumstances men are apt to seek relief from spiritous liquors, which quickly terminate existence, by aggravating all their complaints.

The use of TEA in this country, as an article of diet, comes under this head. The consumption of the Chinese plant is enormous throughout the united kingdoms: it is a beverage well suited to the taste of an indolent and voluptuous age. To the glutton it affords a grateful diluent after a voracious dinner; and from being drunk warm, it gives a soothing stimulus to the stomach of the drunkard. But however agreeable may be its immediate flavour, the ultimate effects are debility and nervous diseases. There may be conditions of health, indeed, where tea can do no harm, such as in the strong and athletic; but it is particularly hurtful to the female constitution; to all persons who possess the hereditary predisposition to dyspepsia,

and all the diseases with which it is associated; to gout, and to those who are naturally weak nerved. If this observation is just, we may account for many taking it with impunity, and holding out the deleterious qualities of tea as a medical chimera, conjured up to magnify the importance of physic, and to frighten old women. Fine tea, where the narcotic quality seems to be concentrated, when taken in a strong infusion, by persons not accustomed to it, excites nausea and vomiting, tremors, cold sweats, vertigo, dimness of sight, and confusion of thought. In its more diluted state, sweetened with sugar, and softened by the judicious mixture of bland cream, it is grateful to the stomach, gives a soothing sensation as if it lulled pain, exhilirates the spirits, produces wakefulness, relieves fatigue; and from being taken down warm, promotes perspiration, and acts powerfully by the kidnies.

But I have known a number of men and women subject to nervous complaints, who could not use tea in any form, without feeling a sudden increase of all their unpleasant symptoms, particularly acidity of stomach, vertigo, and weakness of the eyes. Though

fond of tea myself, I have sometimes been obliged to leave it off, by suspecting that it added to my natural shortness of sight.

As the use of this article in diet extends among the lower orders of the community and the labouring poor, it must do the more harm. A man or woman who has to go through much toil or hardship, has need of substantial nourishment: but that is not to be obtained from an infusion of tea. And if the humble returns of their industry are expended on this leaf, what remains for the purchase of food better adapted to labour? In this case tea becomes hurtful, not only from its own narcotic quality, but because that quality acts with double force in a body weakened from other causes. This certainly is one great reason for the increased and increasing proportion of nervous, bilious, spasmodic, and stomach complaints, &c. appearing among the lower ranks of life. This fact has long been confirmed to me in different countries, and among persons varying much in their employments. I have lately met with many severe and obstinate cases among poor tradesmen and labourers, where it was plain they originated from this cause. I also

think that the use of tea often paves the way to habitual dram-drinking among this class of society, more than among the better orders.

It is worthy of remark, that the finer the tea, the more it contains of the pernicious quality; hence the greens which are gathered in the bud, or before the leaves fully expand, have with that colour the strongest flavour. To sip frequently of green tea, produces wakefulness and gaiety of spirits: hence some literary men, who protract their studies to a late hour, use strong tea, like the late Dr Johnson, to keep them awake. It also possesses an emetic quality, on which account it can seldom be taken in the quantity to induce sleep. Dr Cullen, of Edinburgh, who was subject to gout, said, he never could take it without feeling some arthritic affection of his stomach; yet many dyspeptic people find it highly agreeable, while others feel immediate bad effects from indulging in it.

The nervous ailments of female constitutions, which are often induced and aggravated by tea-drinking, in advanced age, are apt to terminate in palsy. And from

a concomitant torpor of the absorbent system of vessels, they also very frequently terminate in general dropsy. *Coffee* possesses the narcotic principle; but in a less degree than tea: the same diseases follow its use, though its hurtful quality is perhaps diminished by roasting. How far the hot water taken with tea and coffee, increases their deleterious effects on the stomach and nerves, may depend on natural temperament. Some persons are in the habit of drinking them very warm, while others prefer them at a lower temperature. The best degree I should think, about blood heat.

A number of *aromatic substances*, which include all the spices and peppers, as well as some other articles, are in common use as *condiments* of diet. It may be part of natural instinct, that food to be nourishing and agreeable, should be sapid. Yet the infant at the breast seeks no addition to his milky stream; and it is doubtful to me, if any of the warm ingredients are useful. The tropical savage uses pepper with his vegetable meal, in great quantity. Now this kind of diet is watery and insipid. Without something savoury, he has no

pleasure in eating it; and the stimulus of seasoning decomes necessary. But the European who imitates this custom, with his turtle and beef soup, while he is a resident in the East or West Indies, errs egregiously from the indications of nature. All dyspeptic persons are fond of hot articles. When I hear them call for Cayenne pepper at table, it is not difficult to find out their modes of living. It is a key to the temperament, and facilitates the physician's inquiries. But plain fare, such as all dyspeptics ought to be fed on, needs no aid of this kind: and I differ widely from those medical authorities who inculcate the practice; the whole of them manifestly weaken the stomach. All the spices owe their warm pungency to a volatile oil: but as far as I have correctly watched their effect, instead of promoting digestion, they evidently disturb it. They float on the surface of the food, and irritate the cardia or upper orifice of the stomach, which has the immediate effect of inverting the motion of the muscular fibres; and then the flatulence appears by rising upwards, and producing eructation. This belching is said to be salutary, though

proved to be a symptom of disease. If these articles are ever admissible at all, it must be in advanced life, when the vigour of the stomach and intestinal canal grow naturally torpid and slow. Of themselves they yield nothing of the nourishing principle. Soy, catchup, and all the warm sauces, increasing daily in number, have the same pernicious effects. But when we hear of a dozen of large bacon hams being melted down into a few pint bottles of condiments, that pamper and poison health, while they destroy what would have been wholesome food for numbers, it is a moral evil of great magnitude, and ought to be prevented. All the hot peppers have also the effect of hurting the teeth, by corroding the enamel.

It is worthy of remark, that condiments of every kind, from custom, become very desirable, till at last no food is relished without them. But it is rather the palate than the stomach to which they are grateful. Some of the peppers are caustic, and cannot fail of injuring, if not corroding the coats of the first passages. Even mustard, though one of the mildest of the condiment kind, is capable, in the form of a

...pism, of vesicating the sole of the foot, over which is spread the thickest epidermis on the whole surface of the body. Must not such a substance be hurtful to the delicate stomach? To mustard and pepper I have never accustomed myself, from infancy upwards; and I remain a proof of the truth of my own doctrine, few persons being more exempt from dyspepsia. All these articles ought, therefore, to be denied to children, which will be one grand step to make them dislike every hot ingredient in diet, when they grow up. Should brandy, or those waters which are impregnated with the *kernel flavour*, be mixed with sauces of any kind, it is evident they must be noxious. They are dangerous as being narcotics the most enticing of all articles applied to the taste; and children that are early accustomed to such poisons, will run great hazard of ending their career as sots and dram-drinkers.

Food, that affords but a slight stimulus; and whatever is much disposed to ascescency, is hurtful in weak stomachs. Hence the long or inordinate use of fruits predisposes to indigestion. The diseases in question are often met with in ladies of the Roman

catholic religion, induced partly by fasting, and partly by vegetable diet during Lent. There is no relief for such complaints, without a recourse to animal food, and other stimuli.

4. Cloathing. In the present times, cloathing or dress is to be found in the extreme; either too much or too little. It is a proof of the declining vigour of the human frame, when so many young men, in this age, are under the necessity of being swaddled in flannel. An enervated state of body can alone want this assistance. But many of the fair sex have adopted a contrary practice: a few folds of fine muslin, so loosely put on, that the whole dress appears to be made for the purpose of being thrown aside, in an instant, like a cloak or a shawl. Cloathing the body ought to be regulated by the season: but the rule must vary with the age, constitution, and habits of life. There is an intimate connexion between the stomach and the surface of the body: * and

* I lately had a young woman as a patient, subject to violent stomach complaints, who at different times, suffered the loss of the *whole cuticle*. She was restored

as the former is the chief seat of nervous affections, what chills the skin suddenly, is apt to injure the bowels. Eruptions on the surface often free the stomach from painful complaints; and the repulsion brings them back. This is often the case where warm cloathing has been hastily laid aside: we observe this sympathy particularly after wet feet, a fact which most delicate females know well. The lady of weak health, who may wish to display a fine ancle, should be very guarded how she throws off her warm socks. Many evils befal the sex from cold feet; such as follow walking abroad with thin shoes in damp roads; sitting long inactive, as in churches and theatres, &c. I have known some serious nervous ailments brought on by a young lady evading the orders of a judicious parent; and, after being dressed, retiring privately to put off the additional petticoat and under stockings, that she might dance more lightly. As my plan is to make the female habit healthful by active exercise and pure air, so I would recom-

to perfect health by medicine, and the surface of the body is now smooth and even.

mend in addition to these precautions, the use of half boots, which, with a warm spencer, will secure the body, and enable the lady to walk abroad in most kinds of weather.

A few years ago a practice prevailed much among young women, of lacing their stays so tightly, as sometimes to impede the free motion of the ribs and lungs. I have known instances where young girls have nearly expired in a crowded room, by straight lacing, and were only saved by the stays being suddenly divided by a penknife. The modern elegant improvements of female dress very much correct this practice; but I doubt much of tight lacing being entirely laid aside. I believe much bad health has been induced by it: the stomach and other viscera have been so compressed as to bring on fainting fits, and the whole process of digestion disturbed.

Personal cleanliness, being preserved by change of cloathing, may be mentioned under this head. Where it is neglected, from what has been said, it is to be reckoned among the causes of these diseases. That the skin may be pure and pervious,

it ought often to be washed; perspiration cannot make its way through pores obstructed with filth; it must therefore be washed off. The habit of personal cleanliness is best established when begun in infancy, and kept on through childhood and age.

It may be worth while to observe, that it is sometimes of consequence to accommodate the temperature of the water to the conditon of the surface. The face and hands will be liable to be chopped if this is not attended to: very cold water should not be used when the skin is warm; nor warm water when the skin is chilled. Many a polished neck, face, and arm, have been spoiled by not attending to this rule. The same holds good, in going suddenly too near a fire, when coming out of a cold wind: or going into a frosty air too suddenly from a hot room. These are not trifling matters: how many fine women have become nervous by having their beauty spoiled.

5. Passions of the mind. The intercourse and communication between our material and immaterial parts, is a difficult and intricate subject to enter upon. All

philosophers who have ventured to go beyond the threshold of inquiry in this department, have been bewildered, or returned no wiser than when they began. Nature seems to have endued particular portions of our frame with a more exquisite connection with our mental part; and subject to a closer sympathy with our passions. Many external signs correspond with our internal emotions. It is a difficult task, if at all possible, to wear the smile of gladness when the heart is sad. A nervous constitution is ill qualified to disguise its feelings. Persons accustomed to study the variations of feature in the human countenance, such as physicians, sometimes acquire a wonderful expertness in developing the passions. This physiognomonic experience is of great utility to the practice of medicine: it is the gift of genius; and in this respect, the physician like the poet, may be said to be "*nascitur non fit.*" The want of this eminent quality of intellect, makes the laborious plodder a dangerous visitor at the sick bed, particularly to the nervous patient: nature refuses to draw her veil aside to a clumsy observer; who, being denied access to her mysteries,

is very apt to pervert the purpose of what she discovers.

But there is a species of sympathy among certain organs of our body, that points out a more intimate connection with the mind, than what is possessed by others. The lungs and heart, in the thorax; the stomach, intestines, liver, and all the viscera subservient to digestion, have an innate sympathy with our emotions. During strong impressions on the mind, the heart beats quick and tremulous, and is said to palpitate; the motion of the ribs and diaphragm grows irregular and involuntary; and the action of the lungs so unequal as to make respiration hurried and convulsed; hence sobbing, sighing, and panting take place. The effect of violent passions on the chylopoeitic viscera, is to destroy appetite, disturb digestion, invert the peristaltic motion of the stomach and bowels, and render the alvine discharge variable and irregular. The biliary secretion is also inconstant, and perhaps altered in quality: the hepatic, cystic, and common ducts, may be affected with spasms, inverted and obstructed; thus jaundice, and vomiting

of bile are no unfrequent attendants of violent emotions. The ancients held the liver to be the seat of choler and jealousy, hence the poet says,

> Cum tu Lydia, Telephi
> Cervicem roseam, et cerea Telephi
> Laudas brachia, væ, meum
> Fervens difficili bili tumet jecur.
>
> HORACE.

The kidnies, ureters, and bladder, are all subject to this sympathy, from similar causes; as appears by violent pains, strangury, and total suppression of urine: the colour of the urine is variable; and the quantity is sometimes profuse, at other times deficient. These affections of the urinary organs are among the surest diagnostics of nervous diseases. On the whole, all the more violent emotions strongly affect all these organs, which form a chain of feeling with one another, of a more exquisite kind, than is to be found in any other part of the system, or from any other disease. The degree of the effect on these parts, will be in proportion to the sensibility of the temperament; and in many subjects we find hysteric fits, epilepsy, and

other convulsions, tetanus, menorrhagia, amenorrhæa, &c. take place in an instant, from mental sympathy.

One of the most common causes of nervous, bilious, and stomach complaints, is excessive, or long protracted grief. Mothers who have lost children, particularly suffer under these painful affections, and often date their first appearance from the death of a child. I believe the attachment of a mother to the infant, is by far the strongest of all human passions. Medical attendants are in the daily practice of seeing these parental feelings exemplified. We read in Tacitus of a Roman mother dying by the rack, rather than discover the place where her son was concealed, during the contest between Otho and Vitellius. In some instances of maternal affliction, we have observed the faculties so powerfully oppressed by sorrow; so absorbed in the contemplation of one object, that the mind appeared almost, or wholly unconscious of its own existence, and scarcely attended to a single external impression. In such cases the intervals of reason, or consciousness, were only to be marked by sighs, groans, and tears, as the expressions

of grief. Shakespeare has beautifully painted this passion, in the lamentation of Constance for her son, in King John:

> Grief fills the room up of my absent child,
> Lies in his bed, walks up and down with me,
> Puts on his pretty looks, repeats his words,
> Remembers me of all his gracious parts,
> Stuffs out his vacant garments with his form;
> Then have I reason to be fond of grief?
> O Lord! my boy, my Arthur, my fair son;
> My life, my joy, my food, my all the world.

Some such expressions as these might have been uttered by the mother of Sisera, when she heard of his death, if it did not at once deprive her of life. The sacred historian describes in such glowing language her expectation of his return, that he probably withheld the rest of the narrative, from finding terms unequal to express the struggle of maternal feelings, in the transition from hope to despair.* When

* The mother of Sisera looked out at a window, and cried through the lattice, why is his chariot so long in coming? Why tarry the wheels of his chariots?

Her wise ladies answered her; yea, she returned answer to herself,

Have they not sped? Have they not divided the prey, to every man a damsel or two? To Sisera a

David received the account of Absalom's death, he appears to have been so overwhelmed by it, as to be insensible to a victory that secured both his life and his crown. Was ever grief depicted in more plaintive measure than in his exclamation on this occasion? *O my son Absalom, my son, my son Absalom: would God I had died for thee, O Absalom, my son, my son!**

We cannot contemplate such violent instances of natural affection without suspicion of health being injured thereby; and though not immediately apparent, the effect will strike a quick observer in the event of disease.

Next to these heart-rending emotions of parental sorrow, may be reckoned the effects of disappointed love, on the sensible female frame. In the male sex the active pursuits of business or pleasure, more quickly supplant tender impressions; and men much sooner regain that mental tranquilli-

prey of divers colours, a prey of divers colours of needle-work, of divers colours of needle-work on both sides, meet for the necks of them that take the spoil? Judges v. 28—30.

* 2 Samuel viii. 33.

ty which fits them for the busy scenes of life. This is not the case with the fair sex; for the influence on both body and mind, seems to be in proportion to the concealed struggle of attachment. The heart obtains relief in pouring forth its complaint, and acquires resolution when this is done: but the hidden passion burns the fiercer by being suppressed.* The separation of the parties, and long engagements that procrastinate marriage, are often fatal to health. The condition of mind, alternately passed between hopes and fears, is worse than certain disappointment; hence the state of suspence, to persons of nice sensibility, is always deemed the most tormenting.

It is this conflict between attachment and secrecy, that has often given birth to the emphatic expression, "*dying of a broken heart.*" But such afflictions of

* ——— She never told her love,
But let concealment, like a worm i' the bud,
Prey on her damask cheek: she pined in thought;
And with a green and yellow melancholy, †
She sat like patience on a monument,
Smiling at grief. SHAKESPEARE.

† Here the poet has finely caught the *pathology* of love-sickness.

mind commonly, sooner or later, produce some disease of the nervous system, which quickly draws into consent the digestive organs, and others of equally acute sensibility. Hence a certain hue of the countenance is said to mark melancholy and despair, which is brought on by vitiated digestion, and imperfect assimilation of the food.

As the manners of the age must always materially influence diseases of the nervous class, so among their moral causes, ought to be reckoned religious melancholy, and enthusiasm; jealousy, avarice, insatiable revenge, boundless ambition, envy, misfortunes in business, and some species of pride. All these, in their various operations on the human mind, excite extravagant hope, or abject depressions of spirit: in the issue, harass the nervous system; produce watchfulness, or unrefreshing sleep; engender tumultuous passions, impair the appetite, and disturb chylification. To these succeed spasmodic, bilious, and hypochondriacal complaints; all of which center in the organs that prepare and assimilate the nourishment of the body.

Some of the severest instances of these

diseases, which have come under my care, were in officers: men endued with acute sensibility of mind, of fine parts, and with high notions of honour. They had been long tantalized by promises of promotion, and lived to see unworthy favourites put over their heads. Similar cases are too often met with among other conditions of life; where worth, virtue, and talents, must give place to wealth, servility, and intrigue.

The passion of *novel reading* is intitled to a place here. In the present age it is one of the great causes of nervous disorders. The mind that can amuse itself with the love-sick trash of most modern compositions of this kind, seeks enjoyment beneath the level of a rational being. It creates for itself an ideal world, on the loose descriptions of romantic love, that leave passion without any moral guide in the real occurrences of life. To the female mind in particular, as being endued with finer feeling, this species of literary poison has been often fatal; and some of the most unfortunate of the sex have imputed their ruin chiefly to the reading of novels. How cautious then ought parents to be in guard-

ing against the introduction of these romances among their children; so calculated to induce that morbid sensibility which is to be the bane of future happiness; which to prevent, is the task of a correct education; which first engender ardent passions, and then leave the mind without power to resist or subdue them. It is lamentable that three-fourths of these productions come from the pens of women; some of whom are known to have drank deep of the fountains of pleasure and adversity.

The *drama* is another hot-bed of this diseased sensibility. It has been long ago remarked, that few English comedies were sufficiently pure for the ear and eye of a chaste and virtuous woman. But if such scenes are to be found among them, the sentiments they express cannot be much improved from the mouths of some first-rate actresses, who live openly as kept mistresses. We are very little obliged by the late importation of a few loose German plays on the English stage. They are the offspring of a *new school*, and communicate poison in a new way; such poison as has

no antidote on the shelves of the apothecary.

The modern general habit of *gaming*, is a frequent cause of nervous affection, even to mental derangement. It is an hereditary vice in some families, where children are introduced to the card-table before they are half educated. The country life as yet, has scarcely tasted of this depravity.

6. Intense study. Severe mental application depresses the nervous power: and whether this arises from business or pleasure, the ultimate effect seems much the same. Intense thought appears to subtract a great share of excitement from many corporeal organs: when long continued, or often indulged, it leaves them in a state of direct debility. Mathematical studies are said to have this effect more than others; and among some intimate friends I have known these effects. But it is to be observed, that persons attached to the mathematical sciences, are commonly men of cool judgment, of deliberate modes of thinking, not easily diverted from their pursuits, and rather of a torpid nervous system. Their complaints therefore assume much of a hypochondriacal cast.

Among people of a more mobile habit, severe study excites in the first passages, a disposition to spasm, and convulsive motions, amounting frequently to what is called the hysteric affection, or *globus hystericus*. The abdominal viscera particularly feel on these occasions: the strong exertions of the animal functions abstract or expend much of that energy or sensorial power, which ought to be alike diffused over the natural and vital actions. The appetite flags; the bowels become slow; flatulence and acidity supervene from imperfect digestion; the bile is secreted in small quantity, and its flow into the duodenum often obstructed; dyspnœa is a common attendant; syncope not unfrequently happens, and dejection of spirits to such a degree, as to reduce the philosopher to an idiot. Emaciation of body quickly follows this course of life; partly owing to vitiated sanguification, but perhaps also, from obstructions in the lacteals and mesenteric glands. The pallid colour of a hard thinker or severe student, may therefore be imputed to dyspepsia, or to de-oxygenized blood, from confinement within doors. Young men who are ardent

in pursuit of knowledge, and greedy of literary fame, often lay the foundation for stomach complaints at the university, that are never afterwards to be overcome.

Persons much attached to music, as being furnished with acute nerves, and nice sensibility, and of a sedentary turn, are often harassed by these diseases. This remark indeed, applies to all who may be considered as votaries of the fine arts. Such people, whether male or female, have commonly a predisposition to nervous disorders.

I have met with many obstinate cases among schoolmasters; in part to be attributed to confinement within doors, but chiefly to studious habits. But what is still more strange, I have even known them among shepherds, a class of men enjoying the purest air, but becoming nervous and hypochondriacal from an inactive solitary life, and a thoughtful mode of spending time, and reading abstruse subjects.

7. Lactation or nursing. This office of the mother to the child, if the dictates of Nature deserve attention, ought to be considered as a very salutary duty; for if we look to the natural state of mankind, we

find every mother able to perform it. The child-bearing part of life is usually healthy; and weakly females have their health improved by becoming mothers. It must therefore be owing to some deviation from the established rules of the animal economy, that so many women are to be found unequal to this task. It is the duty of the husband to encourage the wife in the exercise of this amiable attention to the infant; and if he prevents it, he rends asunder one of the strongest ties of human affection. Yet we often see mothers so attached to the office of nurse, as to view the weaning of their child with horror: such feelings dignify human nature; what a pity there should be found exceptions to their being general.

It would appear to be the indication of nature, to suckle the infant till it is nine months old, as corresponding with the time of gestation. At this age the child is capable of taking other nourishment for its support. But when the mother grows too delicate and weak for the office, it must be weaned sooner. The complaints which are brought on by long suckling, are much the same with those that follow frequent

abortions, and immoderate or irregular menstruation. They are all of the nervous class. As the regular peculiarity of the sex is the best test of female health, so the vicarious lactation may be considered as a relief to the other organs, and thus beneficial. But when continued too long, the general frame is debilitated, and particularly the uterine system. The strength of the woman is not reduced by affording nourishment to the infant merely; it is the sympathy which subsists between the different organs, that gives birth to morbid feelings, and the stomach and intestinal canal with many others are quickly drawn into consent.

Mothers who trust their children to hired wet nurses, would do well to inform themselves how far these women have weaned their own children with satisfaction. Few mothers, among the decent orders of women, can be supposed to leave their offspring without regret; and it may happen that the health of the other infant is liable to suffer in the conflict. Much pretended refinement often takes place about selecting a nurse free of disease: but what scrutiny can secure the suckling

terially affect the general system of nerves. These evolutions are marked by increased irritability, and fevers of the most acute kind are liable to supervene; and point out the necessity of a soothing regimen, tranquillity of mind, pure air, mild diet, open bowels, &c. If there is an hereditary predisposition, nervous ailments will of course more readily appear, and be aggravated by all improper treatment.

9. Climate. In the description of the inhabitants of a large town, I have mentioned persons returned from the East and West Indies. Such persons are remarkably subject to the diseases of which we now treat. The acute fevers of tropical climates in a particular manner affect the stomach, bowels, and biliary secretion. The yellow fever of the West Indies derives its name, and part of its character, from the excessive flow of bile; which not only tinges the serum of the blood, the urine, and skin, but in a manner inundates the intestines. No pain or tension in the region of the liver, accompanies this unusual secretion; and the bile is taken up by the absorbents, enters the circulation, and produces yellowness of the surface,

without any obstruction of the ducts as in jaundice, for the fæces are highly bilious. There seems to be little resemblance between this endemic of the West, and the hepatitis of the East Indies. I would therefore call it, as has been done by one of the best writers on the subject, *Causos.** In the hepatitis, an excessive biliary secretion is not mentioned. The West India fever is always rapid in its progress; but the liver disease of the East is often so chronic in its form, as to steal on imperceptibly for months, without pain sufficient to create uneasiness or alarm, though it may at last arrive at suppuration. They both affect chiefly young robust Europeans, new comers, who live full, and drink freely of vinous liquors. The same modes of living, we know, create hepatic diseases in England; and the analogy extends to other pampered animals, as the domestic fowl, turkey, and pig. Both diseases leave the digestive powers in a weakened condition; and there are few who do not complain of a degree of dyspepsia after these attacks. But in a multitude of cases in

* Dr Moseley on Diseases of the West Indies.

which I have been consulted, by persons returned from India, it was doubtful to me, whether mercury exhibited as a remedy, or the disease itself, were to be most blamed for the production of dyspeptic affection. As far as I have been able to learn, from both written and verbal accounts, this complaint, so frequent on the Coromandel coast, ought to be treated with large bleedings, and copious active purgatives, in the very first attack. The quantity of blood to be taken, I think, ought not to be regulated by rules laid down by systematic writers for the inflammatory fevers of this country; if it is done at the proper period, it ought to be infinitely larger. If these evacuations have been neglected, or sparingly employed, suppuration, torpor, or infarction of the liver, to a certainty succeed, which render the use of mercury indispensible. Where the disease assumes at first the chronic form, mercury is considered the only remedy. The phrase, "*chronic inflammation*," is a new term in medicine, and I think an improper one here. The less active hepatitis is still a febrile disease, only less marked; for how can we suppose purulent matter

to be generated without those distinguishing phenomena that are characteristic of it? The mercury in this case, I should suppose to act partly on the biliary pores and ducts, partly on the circulation of the liver, but chiefly on the absorbents of that viscus. These effects from mercury being so well known, why contend for it as a *specific*, in this oriental disease? It would therefore appear, that there is a period in hepatitis, when it is indicated and safe; and as its stimulant powers are so evident, that must be, when the symptoms of active inflammation have subsided. We thus see how frictions in some nervous constitutions, must be the most eligible way to direct this medicine, as some authors contend. Yet mercury, nevertheless, at all times has a manifest action immediately on the nervous system; and if limits can be drawn to its exhibition in the different stages of hepatitis, care should be taken that the habit is not destroyed by it, and diseases worse than the original one produced. But if this treatment deserves all the encomiums which have been given it, how comes it, that so many return to this country labouring under the *liver com-*

plaint, as they call it, after having repeatedly undergone the mercurial course?

The consequences of tropical fevers, will however be in a great measure prevented, as the *affusion of cold water* gets into universal practice; and employed with the precautions directed by two great physicians of the present times, my late lamented friend, Dr Currie, and my learned friend and neighbour, Dr Jackson, of the army. In the acute hepatitis it promises to be an effectual remedy. Much reasoning has been employed on the cause and treatment of fever: but no certain method of cure was ever given to mankind before the cold affusion. We can now readily admit that the sudden abstraction of a great quantity of heat, by the shock, as it is called, dissevers in an instant those associated actions which constitute the febrile phenomena: or what is emphatically said, to cut the fever off at once.

The hepatitis of the East Indies, as affecting an organ so necessary to the animal economy, may have thus a large share in the production of dyspeptic complaints.

The effects of a warm climate on the

hepatic system, and producing a redundancy of bile, admit of much speculation. A warm summer in this country has a similar effect: in such a season, cholera and dysentery are common. Excessive heat may be regarded as it acts on the nervous and sanguiferous systems. It powerfully increases the sensibility of every part; and renders the mind more susceptible of pleasurable sensations. The muscular fibre becomes more irritable; and what are called spasmodic complaints, are more common in warm than in cold regions. Fevers also are more frequent than in Europe, in which the stomach is much diseased, and bilious vomiting and a yellow tinge of the *tunica adnata* are attendant symptoms. Insolation is the effect of the rays of the sun in a perpendicular direction, acting on the *sensorium commune*. The last degree of debility, with bilious vomiting, indicates this affection; just as we observe severe hurts or wounds of the head induce the same symptoms. Now we explain these symptoms from the nice consent of parts; they prove the strong sympathy with which the chylopoeitic organs, by their office, are linked with the

functions of the brain. The excessive heat is an exhausting power directly acting on the *sensorium commune;* for compression of the brain from blood or other causes, does not excite the same train of symptoms. We therefore draw the conclusion, that warm climates induce hepatic and stomach diseases, by primarily affecting the nervous system. As far as heat affects the circulation of the blood, it seems to have little effect in bringing on nervous irritability, and is of inferior consideration in this inquiry.

But while we blame the heat of the climate for the production of nervous and bilious diseases among Europeans, we must also take into account their modes of living, so injurious to health. The *most delibitating of all pleasures* is by them indulged to excess; and the passion seems to grow from what it feeds on. Highly seasoned food, the large use of vinous liquors, and licentious manners, carry luxury to its utmost pitch. The warmth of the climate is therefore not to be singly blamed in engendering bilious and dyspeptic complaints.

If persons who live in this way, remain

in a tropical country till they pass the meridian of life, and then return to Britain, they seldom enjoy good health. The cause of this is obvious. They ought therefore, if convenient, to pass their first winters in some of the southern provinces of France, or in Spain or Portugal; and thus accommodate the constitution gradually to the great change of temperature.

Some districts of country that are low, swampy, and subject to fogs, commonly disagree with nervous and bilious people. And those seasons when the weather is variable, and liable to sudden transitions, are also hurtful. Many of their symptoms, particularly depression of spirits, increase under a cloudy atmosphere: hence the glooms of November are proverbial for having this effect.

10. Medicines. All nervous persons are uncommonly fond of drugs; and they ar the chief consumers of advertised remedies, which they conceal from their medical friends. Among some well meaning people, this inordinate desire for medicine has frequently become of itself a disease. With many of them, physic to be useful, must be clothed in mystery; and the mo-

ment a discovery is made of the composition, the confidence is lost. Medical attendants have too often brought this punishment on themselves. Were they unanimous in combating the prejudices of mankind, by candour and openness of conduct, by a fair avowal of the imperfections of their art, and the honest confession that articles of *Materia Medica* form but a small portion of its resources, they would not so frequently see their commands disregarded, or learn that their compounds have been thrown out of a window. This is the only way in which I can account for so many persons of good sense and discernment, consigning themselves and families into the hands of impudent and illiterate quacks.*

It was the saying of a very sagacious professor of medicine, to his pupils, "*young gentlemen, if your medicines should do no good, take care that they do no*

* The duty on quack medicines at this time is estimated at upwards of 300,000l. annually. From this it may be supposed that ignorant pretenders to medicine take not less than *two millions* out of the pockets of the community!

harm."* When active medicines are long continued, and do not cure, it is very likely they may do mischief. But the remedy that cures one disease, if injudiciously administered, not unfrequently predisposes the body, and paves the way to another malady. I shall begin with

Emetics. The exhibition of *emetics* is often taken out of the hands of the medical profession; and every good woman thinks herself competent to direct a vomit. Some people with delicate stomachs are in the habit of taking these articles, for every uneasy state of that organ, which is construed into a foul stomach. But nothing can more certainly tend to weaken, nay paralyze that viscus. The operation itself is painful and unnatural; for the act of vomiting is to invert, and evacuate the contents of the stomach the wrong way. This cannot be done without medicines that are first highly stimulating: they pass through the stimulant stage of the process first; and when that is over, the fibres of the stomach being exhausted for a time, sick-

* The first Dr Rutherford, Professor of Medicine in the University of Edinburgh.

ness is the consequence, and vomiting succeeds it. This nausea is sometimes so severe, as to occasion fainting, and even convulsions; and the frequency of the pulse during the operation is often so reduced as to give serious cause of alarm; and is at all times slower till the sickness is overcome. Such are the symptoms to be marked during the emetic effects of tartarized antimony, vitriolated zinc, vitriolated mercury, ipecacuanha, squill, &c. If therefore, this operation is too frequently resorted to, what is to be expected but a weakened, mobile, or torpid condition of the stomach, and every organ that fills a link in the great chain of sympathy with it. The hurtful effect is also much increased by the copious draughts of warm water, taken to encourage the vomiting.

At the time that James's Powders were in general use, and when families were in the practice of taking that medicine as a preventive of fever, at stated periods, weakness of stomach and indigestion were often traced to this cause. Ignorant people are apt to consider many complaints, where the pulse is quick, as fevers, and fly to improper remedies.

But antimonial emetics require the utmost caution in the exhibition to nervous people, and all who possess irritable bowels; such as dyspeptic and gouty; severe cramps, hysterics and diarrhœa, too commonly follow. They likewise encourage eructation; and by inverting the gullets of some people, a kind of ruminating of the food takes place, a habit very disagreeable and disgusting. When we reflect what a small portion of antimonial preparation is required to excite vomiting, we must be convinced of its uncommon activity, and that it acts immediately on the nerves of the stomach. The same guarded practice applies to all the metallic oxides, when used as emetics. What may at seasonable times be a valuable remedy, may thus, by being improperly directed, have the most baneful effects. Nervous patients are particularly subject to a kind of rising in the cardia, or upper orifice, a sort of inverted motion in some of the muscular fibres, with distention, flatulence, and acidity, that create vast sickness. But to have recourse to vomits for relief, would only aggravate the complaint. These persons are also more easily affected by disagree-

able objects, and bad smells, than others, which harass them not a little. As they grow acquainted with this frailty of their stomachs, they will rather study to avoid the causes, than trust to any article of medicine for relief. When constant vomiting has been brought on, in nervous stomachs, by whatever means, no complaint is more difficult to be restrained: some afflicting cases of this kind have come within my knowledge, in young persons, part of which terminated fatally.

Purgatives. This class of medicines, like the preceding, are too often directed by improper judges of their fitness. But the greatest harm is done in infancy and childhood, when parents run to the aid of physic for every trifling complaint, but chiefly for cutaneous affections. It is immediately decided that these spots are owing to bad humours and foulness of the blood, and must be carried off by a purge. Such reasoning as this formerly prevailed among medical people; we cannot therefore be surprised that persons not in the profession should still retain a little of the old leaven. Purgative medicines differ extremely from one another; and if it is a

nice point in medical practice to suit the purge to the nature of the complaint and peculiarity of constitution, it must be often dangerous to trust them in common hands. I was once called to visit a farmer who had taken two ounces of saltpetre, instead of Glauber's salt. I found him in extreme pain about the stomach, with ghastly looks, an intermitting pulse, and cold sweats. A few minutes longer would have been too late to save him: by drinking plentifully of warm milk and water, and a brisk emetic, he was recovered. But I have known similar cases prove fatal.

Confinement within doors, an uniform mode of living, and sedentary habits, are so commonly met with, among persons of the nervous temperament, that a constipated state of body is a general condition of their disease. Hence the frequent recourse to medicine for opening the bowels. Some of the most drastic purgatives, such as aloes and scammony, come at last to be in common use with them. This custom soons begets a habit; when the bowels are brought to that torpor and inactivity as never to be moved without the aid of a drug. The sensibility of the intestines is

thus, by degrees, worn out; the lacteals which take up the food, the mucous glands and exhalents, that pour forth fluids, as well as the nerves and muscular fibres, grow torpid: the consequence is the loss of the peristaltic power, and the bowels are apt to run into inverted motion, and spasmodic constriction, till a fatal cholic, an intussception, iliac passion, or cramp, close the scene. Painful diseases of the rectum, schirrus, hemorrhoidal tumours, and fistulæ, too often render life miserable, from this ill-conducted practice. We have known families of children that underwent a course of purging twice a week!

But if *mercury*, in the form of *calomel*, or any other preparation of that metal, make part of these habitual purges, the consequences are always to be dreaded. Calomel is a favorite article with some physicians as a purgative, and from the minuteness of its dose, very desirable to the patient. It also operates quickly and briskly; which, with nervous and dyspeptic subjects, is matter of great satisfaction; for their odd feelings and singular sensations within, give the suspicion that they are full of obstructions and cannot be suf-

ficiently evacuated. Yet such instances of slow bowels are not to be considered as depending altogether on a local affection. They are joined with a general state of the body, and only to be radically cured by correcting the original evil. Thus a long walk out of doors, and a little active exercise and recreation, will effect sometimes, what large doses of medicine are unable to perform.

But *mercury* is the most dangerous of all frequent purges; it sooner exhausts the irritability and vital power of the intestines, than any other metallic oxide, except arsenic. It never fails in the end to add to the disease: it is peculiarly contra-indicated in the nervous temperament, from the mobile disposition of nerve; and its action on the bowels, very much resembles a state of dysentery, by producing the most violent contractions, gripes, and tenesmus. It thus frequently brings on *prolapsus ani*, a complaint to which persons of weak bowels are liable, and especially women, who have experienced hard labours, and borne a number of children.

Many volumes have been written on diseases, supposed to have originated from

the use of *mercury* when given for the cure of *lues venerea:* yet strange to relate, its most common consequences, dyspeptic and nervous affections, are scarcely mentioned. * I firmly believe all the derangements which it occasions in the body, are small when compared with the injury done to the nervous system and digestive powers. Some physicians and surgeons fly, even in common cases, to one of its most dangerous preparations, *hydrar. mur.* and seem to overlook its ultimate effects on the constitution. It has often been my lot to witness these effects in the practice of others: for of *fifty thousand cases* of the venereal disease, which I have attended, I am convinced, that not one of the number ever required this acrid mercurial. Hæmoptysis ending in phthisis, was a frequent sequel to this treatment.

* A little tract, "ON THE USE AND ABUSE OF MERCURY," has just been published by Dr Wilson; in which he particularly notices its hurtful effects on the stomach and intestines. I am glad to observe, that his remarks are very much like my own. This essay appears to be only a prelude to more extensive disquisitions on the subject; which I hope the learned author will follow up with his accustomed ability.

It is well known that miners and workers of this metal in the various arts, are, after a certain time, subject to the most violent nervous afflictions, such as cholics, epilepsies, cramps, tremors, &c. and the last stage of these is palsy, in its most hideous form. In the silver mines of Spain, in South America, where mercury is employed to separate the gold, the poor slaves seldom live three years, from being exposed so much to its fumes. Hence to be sent to the mines implies the last degree of human punishment. As the lues venerea extends in society, and the exhibition of mercury for its cure becomes every day more familiar with medical people, there is danger that they forget they have in their hands one of the most active mineral poisons, and extend its use to all those diseases that resist other remedies. In the hands of the ignorant and indolent of the profession it has done incalculable mischief. The ignorant man is neither capable of selecting its proper preparations for particular conditions of body, nor of knowing when it is forbidden ; and he is unable to discern when it has done harm. The indolent among us, who give themselves no

care about the investigation of a distemper, cannot be fit persons to prescribe an article, that injudiciously given, may destroy life. This remark does not merely apply to the vender of advertised remedies; it comprehends many in private life, who, from deficient education, are not entitled to more confidence than the itinerant tribe.

But there is a form of the diseases of which we now treat, in which mercury is said to act with undeniable efficacy; namely, in what are called *bilious complaints.*

The term belongs to common language; as such I have adopted it in my title; but it is not correct in a medical nomenclature. Some members of the profession, to improve our vernacular idiom, have thought proper to give these ailments the name of *liver complaints*, as that organ is said to be their seat; but this term is equally undefined in a scientific view, as that of *stomach complaints*, so long applied to diseases of the digestive powers. The phrase *bilious* derives its origin from that tinge of the skin so often observed in dyspeptic persons, who also occasionally pass bile both upwards and downwards. Now

bile appearing in these forms, being a natural secretion made by the liver, is to be considered as the *effect*, rather than the direct *cause*, of indisposition. In the present day, a dyspeptic person no sooner complains of pain in the right hypchondrium, than the liver is said to be diseased; and a bilious suffusion of the surface, is considered an infallible symptom of the same viscus being affected; and the mercurial process is immediately commenced. It is disgusting to hear this phraseology so common in the mouths of medical people. It is well known that jaundice itself is common enough, even during the mercurial treatment of lues venerea.

We shall learn from a description of the nervous temperament, that persons subject to indigestion, to frequent discharges of bile, and spasmodic affections of the chylopoetic organs, are endued with uncommon delicacy and irritability of the first passages; and that this state is generally attended with great debility. Such a condition of the muscular fibres, in the osophagus, stomach and bowels, with all the canals which pour fluids into them, naturally makes the whole subject to reversed

motions, irregular contractions, increased sensibility in one part, and deficient power, or torpor, in another. The state of the liver itself will partake of all these irregularities. Its secretion will sometimes be suspended, sometimes deficient. It will suffer stagnation in the biliary pores, and in all its ducts. Even when it flows freely into the duodenum, it will at one place be collected in greater quantity than at another; sometimes retained, and at others flowing profusely; and the slow or quicker motion of the bowels, will exhibit a proof of this inconstant passage of the bile in the alvine discharge; in its colour, its consistence, and fœtor; while transient jaundice will also appear.

The ducts may also be obstructed by biliary calculi, over which mercury has no power. Indeed dyspeptic persons are very subject to these concretions, which are probably owing to some disposition in the bile itself.

These commotions will frequently bring on epileptic and hysteric convulsions, violent cramps, and death. The mind strongly sympathises; it is irritable, irresolute, timid, desponding, and suffers more or less

such derangement in its relation of things, and in its perceptions, as amounts to a degree of delirium. This constitutes what, in common language, some persons call a *bilious or nervous attack.*

This being our explanation of the biliary affection of the nervous temperament, it must be straining facts to the utmost, to find any analogy between it and the hepatitis of the eastern hemisphere. How indeed can any qualified observer of the phenomena of disease, compare the full robust habit of a young European, on the coast of Coromandel, with the weakly and delicate nervous lady of our climate? Yet the analogy, monstrous as it is, in the practice of some physicians, has been said to be correct; and dyspeptic and hysterical females, have, on the faith of this doctrine, been tortured with mercurial courses, till their very teeth have been in hazard of dropping from their sockets, and their lives brought into danger; and this plan of treatment sometimes repeated, as the symptoms were found to recur.

I hold it as an unquestionable fact, that a peculiar predisposition attends both diseases; and that local causes excite both.

It appears from many particular symptoms, that a directly opposite state of the body prevails in the two complaints. How then can the same medicine be indicated in both? The icterus is not characteristic of hepatitis; nor is the capricious disposition of the bowels, and the mental disquietudes of nervous affection, ever included in the account of its symptoms. The analogy therefore between hepatitis and the dyspepsia of the nervous temperament, has no foundation in pathology, and leads to no rational method of cure. That the liver may be enlarged in these diseases, as well as from hepatitis, I readily admit: but such enlargement must be brought on in a very different manner. It must be chiefly owing to the debility of the hepatic nerves; by which means a torpor or kind of paralysis takes place; effusion of some kind may then happen in the parenchyma of the liver, which the lymphatics are not able to carry off. What are called tubercles of the liver, are most likely enlarged lymphatic glands and vessels; this may be another cause of increased size. But it is probable also, that the secreted bile itself is frequently the cause of the great bulk,

from torpor of the *pori biliarii* and ducts. I believe however in dyspeptic habits, that such increased size of the liver is a rare disease; and when it does happen, it ought to be considered as an effect, not a primary cause of indisposition. If, therefore, there is much nervous predisposition, mercury must do a great deal of harm, and add to the mischief.

Some Persons have an opinion, that mercury acts immediately on bilious affection, independent of evacuation; but this is fanciful. A purge, in which calomel is combined with a cathartic, as it excites the duodenum in its passage, it also urges into action the different ducts which open into it; and the last evacuations of a mercurial purge are commonly bilious. This increased action may, by sympathy, go farther; the *pori biliarii* may feel it, and perhaps the whole viscus. Thus the liver may be purged, and excited to healthful action. But what one dose or two may effect, a third and fourth may destroy; and by knowing the constitution of the patient, we shall know when to stop. And as cramps and spasms, of the most painful kind, are part of these diseases, so mer-

curial purges, as I have often seen, cause great hazard of bringing them on. But there are many purgative articles, that in these cases, have all the good effects of mercury, without the deleterious ones; and they ought to be preferred. Very active exercise will also, in many instances, supersede the use of medicine; so great is the power of agitating the abdominal viscera, in promoting the due flow of bile.

The hepatitis of the East Indies has been long considered a serious disease, and often fatal; and as it has seldom yielded to a mild treatment, the exhibition of mercury is justified. But it cannot be denied, although this medicine is chiefly to be depended on, that even in India it has done infinite harm to the constitution. I therefore embrace the opportunity of quoting the following passage from a modern Journal. It is given without the writer's name, but the cautions which it inculcutes are of such great value in practice, that even anonymous authority renders it respectable.

Extract of a letter from a surgeon on the Madras establishment, dated the 22d October, 1805.—"My last letter from ——

" gave me sad accounts of his health. He " is suffering much from excessive use of " mercury; and has had, he says, *spasms* " *of the diaphragm, and excruciating pains* " *in his skin, bones, and head.* It may be " news to you, that mercury in this coun- " try, when given in too large quantity, " causes sufferings more dreadful than the " disease for which it is a *specific*, and ex- " perienced surgeons are cautious never " to exceed in its employment. You ask " me if the erythema mercuriale is fre- " quent with us? Very lately a brother " surgeon here had a case of it in his " hospital which terminated fatally; and " with the natives, who never can be made " to cloath themselves sufficiently, or al- " most at all, when under the use and in- " fluence of mercury, this disease occurs " frequently, and often proves destruc- " tive."

If such are the effects of mercury in robust constitutions, and in a climate peculiarly favourable to its administration, what severities are we not to expect in weak nervous bowels, and in a condition of atmosphere, that in despite of every precaution, so often throws its activity on

the first passages? It is to be hoped the advice given in this extract will not be lost on physicians and surgeons in England, who are so apt to resolve every pathological difficulty, into a liver complaint; and pour in mercury *ad infinitum*.

Mercury as a cathartic acts best in conjunction with jalap: a pill containing three grains of the latter to one-sixth of a grain of the former, purges moderately in a hale state of body. I may be told in contradiction to this, that a *dram* of calomel has been given to a child; and *half an ounce* to an adult, in a few days, without any bad effect. But, because these patients were not destroyed, is the heedless administration of so active a medicine to be justified by such proofs? I have seen persons survive large doses of *corrosive sublimate mercury and arsenic;* yet no judicious physician will compare these recoveries with the limited doses of either article, adapted to the nature of temperament, and diseased state of his patient.

Mercury being a medicine given in a great variety of preparations, has long been the chief ingredient in quack remedies. It is thus vended under the form of tincture,

drop, powder, pill, &c. An article of *materia medica* possessing such activity in some conditions of the living system, may be capable of producing great and salutary changes. But in effecting these, certain premises and indications are to be attended to, to justify the exhibition: and the physician who does not give himself the trouble to consider these circumstances, may perform the part of an executioner. Mercury being particularly hurtful where the stomach and bowels are very irritable, is forbidden in gout and in the nervous. In those persons, frictions of the ointment lessen the danger. Hence it is improper in women and children; in those subject to epilepsy, or other convulsions; and in every one, who may be liable to spasmodic complaints of any form. In states of torpor and strength, it can be given with more safety: it is supposed to be the best remedy in glandular obstruction, if the attendant debility does not contra-indicate its use. But it is too often to be observed, that those who make most free with the exhibition of mercury, are the least qualified to guard against its bad effects in improper cases.

It is very common for a long use of mercury in lues venerea, to produce miscarriage, and most of the sexual weaknesses, in women; such as flooding, leucorrhœa (whites) spasms of the stomach and bowels, fainting fits, &c. But when these painful complaints and a ruined constitution are daily to be seen arising from the wanton and injudicious exhibition of this medicine in pretended liver disease, does it not amount to more than culpable homicide? Of all that I have seen of ignorance and inhumanity in the profession, in different situations of life, and in all parts of the globe, which it has been my lot to visit, nothing has appeared so justly to excite my indignation and pity as what I have witnessed on this subject. It has often amounted to torture and death, *secundum artem!*

I resided a few years ago in a naval seaport, where I was often consulted for stomach and nervous complaints, by ladies, the wives and relatives of officers, and my other friends in the public service. Many of these females had been residents in warm climates. The great resemblance which the cases had to one another, excit-

ed no small degree of surprize at first, till I learned they had been all subjected to a similar mode of treatment. In short, they had been patients of a physician of extensive practice in the neighbourhood, who prescribed mercury for every disease. Most of these women, among whom were some of great mental and personal accomplishments, had been kept for months or weeks under the influence of the medicine; with their throats, mouths, and tongues so swoln and excoriated, and the teeth so loose, as to confine them to a diet of slops. Those who had no stomach complaints when they began this treatment, found them come on after it; and such as had been nervous and dyspeptic before, felt all their ailments aggravated. This physician, not satisfied with the milder preparations, made a common remedy of hydrar. mur.

A practice not unlike to what I have just related, made some noise in our navy during the late war. A physician on a foreign station, took it into his head that all modern diseases originated from Syphilis. It was in vain that officers and seamen pleaded innocence: if they were unconscious of receiving infection themselves

they were told it must come from their parents, sometimes to many generations back. Few men could answer for their purity on these occasions: a mercurial course was therefore directed; not for days or weeks, but for years; for there was no safety but in continuing it at intervals through life. A medicine of the kind, employed on such terms, could not fail to do harm: some of the most unfortunate stomach affections which ever came under my care, owed their cause to this treatment; a few valuable men were brought to the grave by it, in the circle of my own acquaintance, where I suspected a schirrous pylorus.

Mercury exhibited in quantity, either by the mouth or by friction, very quickly excites an artificial fever, ushered in by chills, shivering, and a hot stage. The pulse becomes frequent, at first full, but latterly weaker and quicker: want of appetite, nausea, and often vomiting, commence; restlessness and night sweats supervene; the body bears the cold air ill; head-ach; fœtid breath; the bowels are commonly oppressed with flatulence, severe twitches, purging, tenesmus, and even bloody stools;

to these symptoms, debility and emaciation succeed; the tongue, mouth, and throat, inflame, swell, grow painful, and ulcerate, and the saliva is poured forth in a continual stream. During these effects of mercury on the body, the mind becomes irritable and unequal, but generally low-spirited; and after some time exhibits all those feelings, usually called nervous, inducing the hysteric affection, convulsions, and frequently the epileptic paroxysm itself. It is therefore plain, that in the nervous temperament, all the phenomena now described, must appear with greater violence, as is observed in children and women, and in all who have weak bowels.

The constitutions of children, in point of debility and irritability, approach to the female habit of body: the nervous power is liable to irregular motions; easily affected by stimuli, and prone to convulsions. Hence mercury is apt to have dangerous effects upon them. With some medical people, as well as parents, this medicine is much employed as a vermifuge: it has the advantage of being easily disguised, and if joined with a purgative, acts very briskly, and commonly brings away many of the

vermin. But worms being only the consequence of a weak condition of bowels, mercury, when continued long, instead of correcting the cause, tends still more to debilitate the first passages, and lays the foundation for much ill health. I shall touch on this part further, in the treatment, as being intimately connected with my inquiry. In the mean time, I cannot sufficiently reprobate the conduct of some persons in high life, who permit their names to be published in the hand-bills and advertisements of an illiterate quack, whose worm medicine is known to be mercury, and liable to be given in very unequal doses, from the nature of the composition.

About twenty years ago, two children of a friend of mine, took calomel from the family apothecary, for worms. The exact dose in which it was given I do not recollect; but the motions which it produced were innumerable. The family, during this process, were all at once alarmed, by the singular noise which the children made in their throats, with an unusual change of countenance and cast of the eyes; which were quickly followed by violent agitations and contortions of body, and lastly convul-

sions. In a few days these odd complaints disappeared, as the effects of the mercury abated: but the apothecary thought proper to repeat the calomel, obstinately contending that the fits were mere affectation, and not to be imputed to the medicine. The same effects however appeared after the second exhibition; the evacuations were not less profuse and debilitating, and the convulsions more frequent and severe. The moment one child was seized, the other was affected in like manner: so certain was this kind of nervous sympathy, that there was a necessity for separating them, that they might not see or hear one another, and the fits went gradually off. One of them, a young lady, has been long a martyr to the most painful nervous complaints; and I cannot help thinking that much of this indisposition was brought on by this vermifuge process.

This mineral, after long use, besides exhausting the nervous energy, is known to affect the bones, and render them friable, just as they are found in rickets and in old age. A poison so subtle and active, thus consumes the vigor of body, and brings on premature senility. These hideous effects

are most probably produced by the mercurial oxide first depraving the digestive powers, preventing assimilation of the chyle, and vitiating sanguification. On the whole, while mercury is capable of great good in the hands of the sagacious physician, when indiscriminately used by the ignorant of the profession, it must do incalculable mischief.

Since this work was first published, the subject of biliary disposition, has undergone much discussion among physicians. I have however seen no reason for altering either my opinion or practice. And I hsve often observed in those habits, vulgarly stiled *bilious*, after mercury and other purgatives have failed, that a medicine, directed against the weakened stomach and bowels, has succeeded in procuring a regular discharge of bile; and as a consequence, a due alvine evacuation. Some of these cases afforded me a fine opportunity of convincing others, that sympathy between the stomach and liver, by nervous communication, had more to do with the secretion and flow of the bile, than they were aware of. Dr Saunders, in an appendix to a new edition of his work on the li-

ver; and Dr Falconer in the Transactions of the Medical Society of London, vol. 1. part 1. have taken up this subject: and by arguments exactly like what I have offered, have called the attention of the profession to weigh the merits of the discussion.

Bitters and aromatics. These articles when well timed and directed with judgment, are valuable medicines in treating the diseases now under discussion. But like many of the other good things in life, are too often misapplied, and thus tend to confirm what they were meant to remove. I here use the term *bitters* in a greater latitude than is commonly done by writers on the *materia medica*, and include the celebrated Peruvian bark, and those substances which are allied to it, either in their effects or sensible qualities. Their office is to strengthen and stimulate. The cinchona (bark) itself is a medicine now-a-days in such general use, that there are few diseases to be met with in this country, in which it is not given at one period or another; and it is to be found in every family medicine chest. An article possessing so much active quality in the human body, as to be capable of suspending a se-

vere ague-fit, cannot be deemed a passive remedy, or what ought to be trusted in every person's hands. The pharmaceutical treatment of cinchona is also worthy of consideration. When duly prepared, and suited to the condition of stomach, its powers are invaluable; whereas administered in an improper form, it may have most baneful effects. It is recommended by some authors in doses so large, as in our practice were never seen expedient, or the stomach capable of retaining them. It is therefore to be suspected, that in certain diseases, pain, sickness, and vomiting supervene its use, and that the effects of oppression about the stomach after a large dose, have not unfrequently brought on such a degree of torpor, as to terminate in death. On the coast of Africa, where intermittents assume a more aggravated form than ever seen in Europe, I always found, upon an average, six drams of the powder given in eight doses, for four hours before the accession of the cold stage, at half an hour's interval, have more effect than eighteen drams given in twenty-fours before the fit. This was a great saving of the medi-

cine, which is worthy of attention by naval or military surgeons on foreign stations.

Nothing in the practice of physic can be more irksome than to see a poor patient struggling to get over his bitter potion: it ought at least to caution the physician against an unnecessary allowance of medicine, for it must often defeat its purpose. When convalescent myself of fever in the West Indies, I was ordered a dose of bark every hour; but such was my aversion to the medicine, and such the irritable state of my stomach, that the fourth dose always brought on sickness and vomiting, by which the whole was disgorged. I tried from day to day to go on with my quantum: it was all in vain; and at last the very sight of bark made me sick. If such a school cannot teach a physician sympathy, I know not how it is to be done.

Those articles, more strictly called *bitters*, require still more caution in the exhibition, as possessing the power of exhausting the excitability of the stomach by long use. They impede fermentation in the *primæ viæ*, and correct acidity; these they effect chemically. When long continued, as in the history of the Portland powder

for gout, they are said to produce palsy and dropsy, and every species of nervous debility. There must therefore be a period when the good effects cease, and which careful observers will mark. If *bark* and *bitters* are medicated by alcohol, in the form of tincture, it is obvious the hurtful effects, after a certain time, must be inevitable.

The *aromatic substances*, among which may be reckoned all the spices and volatile oils used in either diet or medicine, by repetition become hurtful to the stomach, whether as condiments, with food, or to cover the disagreeable flavour of some articles. These substances have, therefore, a limited time to do good, that their use may not become habitual. There is always something wrong in those stomachs which hanker after hot ingredients: when these persons are served with watery preparations of medicine, they complain that they are too cold, and disagree with them; but the moment a spiritous tincture is substituted, there is little danger of its being refused. It is the duty of every honest physician to resist those cravings of his pa-

tient, and to endeavour all in his power to correct hurtful propensities.

Vegetable Acids. It is a well known fact, how much these acids weaken the organs of digestion. They are often drank clandestinely by corpulent young women, to correct obesity, that they may preserve their shape. This is always accomplished at the expence of health : cramps and pains of the stomach, morbid acidity, and eructations, bowel complaints, sallowness of complexion, nervous head-achs, fainting fits, amenorrhœa, fluor albus, strangury, &c. follow this practice, and death frequently happens. All persons subject to indigestion, the gouty and hysterical, know well from experience, the bad effects of native vegetable acids. They may be supposed to act directly on the fibres of the stomach : but if they act chemically on the gastric juice and bile, they cannot fail of vitiating the chyle, preventing the assimilation of the different intestinal juices, and thus depraving the nourishment. But it may also be supposed, if not in some degree certified, that in passing the glands of the mesentery, they cause obstruction and enlargement of them, give a disposition to

scrophula, and otherwise injure the whole habit. Vegetable acids have thus a directly opposite tendency to the mineral acids, such as the sulphuric, muriatic, and nitric, all of which have a share of reputation, in states of weakened digestion.

Narcotics. These include ardent spirits, opium, and all those articles commonly called anodynes, hypnotics, paregorics, &c. such as lactuca, bang, belladonna, hyosciamus, laurus cerasus, cicuta, &c. Of the effects of ardent spirits, in producing stomach and nervous complaints, I have treated largely in my Essay on Drunkenness, to which I refer the reader.* All the articles now enumerated, act very much alike on the human body. In small quantities, they induce vigor, activity and strength, and an increase of muscular power throughout the frame; at the same time are felt serenity, pleasure, and courage of mind. In larger doses they bring on sleep, stupor and delirium; and when carried to the utmost quantity, insensibility, apoplexy and death. It is of little moment in this inquiry, whether narcotics

* Fourth Edition, Newcastle and London, 1812.

ought to be considered as directly or indirectly sedative. They are forbidden in all inflammatory diseases, where they certainly do harm in the first stage: they generally occasion constipation, but hyosciamus has a laxative quality. When long continued, they are known to weaken the nervous system in a surprising degree; disposing to amentia, epilepsy, palsy, tremors, convulsions, melancholy, madness, &c. No substances in nature more certainly injure the powers of digestion, and bring on all the severe symptoms of nervous infirmity. This effect of narcotics, is most likely primarily derived from the nerves of the stomach, with which they come first in contact, and from thence extended to the other viscera. Where there is a predisposition, or hereditary nervous temperament, or gout, the permanent use of them is still more quickly hurtful: in such states of the body, they ought, like vinous spirits, never to be prescribed but from necessity.

Opium, the noblest attribute of Medicine, so calculated by its powers to sweeten life, and suspend pain, when all earthly comforts avail nothing, has its limits in doing good. It is a misfortune when it comes

to be dispensed by injudicious hands; for it is often prescribed by the most ignorant, in diseases where it is forbidden. The bodily complaints of the human race, when enervated by luxury and refinement, seem to produce more acute pain; at least the temperate man is observed to bear sickness with more patience and resignation, than those accustomed to indulgence. The spirits are apt to flag, as if the mind had no resting place. Opium alone gives relief, though it must feed the disease. Such persons seem to compound with their physician for sound nights, and days of ease; and if he does not comply he must be changed. Hard is the task imposed on the medical attendant; he must obey, or starve. The *night draught* thus becomes familiar in the family: the servant goes to the apothecary for it with as little ceremony as he buys kitchen salt. He sees the shop boy count the drops into the phial, and when he gets home, narrates the composition of the placebo to the cook and the nursemaid. Not a domestic in the house but soon learns what a fine thing laudanum is; and master swears he can get no rest without it.

If such things did not exist, how comes

it that seven young women in this neighbourhood, within the last three years, should have known that a large dose of this tincture will kill. Two of the number effected their purpose. I was called to visit another in Percy-street; she had swallowed twelve drams of laudanum; but I arrived before it had been twenty minutes in her stomach, and by plentiful dilution with vinegar and water, followed by an active emetic, the bad effects were prevented. I remained in the house till I was sure that every drop of the opium was discharged, and she did well. It appeared that these poor girls had become the dupes of designing men, and called for death to end their sufferings. Thus the dose of opium concludes what was begun in the circulating library. A little more secrecy and discretion are certainly wanted in the general use of this dangerous narcotic.

But there is reason to believe, that even medical men themselves, have, of late, entered too easily into the indiscriminate use of opium. He must be a short-sighted physician that does not calculate upon the ultimate effects of his prescription: it is a weak excuse for getting quit of the impor-

tunities of a patient, by complying with an improper request, that may afford temporary ease, at the expence of permanent health. In the nervous temperament it is particularly hurtful. I am acquainted with numbers of ladies that feel such horror at taking opium, as nothing can equal; and in every illness they may labour under, constantly warn the medical visitor against giving it, as no disguise can make it agreeable to them. But when opium happens to be soothing to weak nerved people, from their quick sensations, it is apt to be the more craved for, and converted into habit. The langour and dejection which follow its operation, pave the way for the repetition of the dose, till general debility succeeds. In such constitutions, the exhibition of opium ought never to take place on slight occasions. Midwives, nurses, and other persons out of the medical profession, who dispense laudanum at random, ought to be solemnly warned against it.*

* A medical gentleman, in attending a young lady, to whom he was much attached, and who had a great dislike to opium, when that medicine was found necessary in her complaint, with great gallantry, he swallowed, in her presence, double the quantity he intended

The *opium-eaters* in Turkey, are the most pitiable objects in society. Their squalid looks and emaciated bodies, after a long course of this narcotic, evince how fatal its use is to the digestive organs, and how it prevents the due assimilation of nourishment. On dissection, the same effects appear in the stomach, liver, and bowels, which follow a long course of ardent spirits. Like the dram-drinker also, when deprived of his wonted cordial, they are languid, faintish, low-spirited, nervous, and feeble. Their limbs totter under them; their heads and hands tremble, and the very wind is in danger of oversetting them. Their faculties seem exhausted, the memory fails, and the only remnant of intellect which they possess, appears in the frightful accounts which they give of their horrors, and the hypochondriacal glooms with which they are infested. No form of disease exhibits existence under a more deplorable shape than the *opium-eater* and *dram-drinker*. There is great reason for suspicion, that this drug is daily getting

for her. But such were its effects, that he fell asleep on horseback, and had nearly broken his neck by a fall.

more into use as a cordial, and privately consumed by numbers of persons. It is well adapted, from its preparation in tincture, to be carried about, and drank at pleasure. Its exhilirating quality creates a momentary heaven for minds who find nothing but guilt and despair in their own reflections: hence it has grown so general in high life, and in fashionable circles. I am also of opinion that many sudden deaths are in the present times, occasioned by this drug, without exciting the least suspicion of its being taken. Those who accustom themselves to the narcotic article called *bang* in the East Indies and in the Turkish dominions, are said to perish under diseases similar to those of the opium-eater.

Tobacco is another narcotic in common use. Persons who are in the habit of chewing, snuffing, or smoking this Indian leaf, are not aware, that a few grains of it taken into the stomach, cause sudden death. Nay the smoke of it injected into the rectum, has frequently proved fatal. It acts powerfully on the nervous system, destroys the sensibility of the stomach; and it is observed that those who devour it in great quantity, die of apoplexy, palsy, and dropsy.

Poisons. All kinds of poison, so called, whether taken from the animal, vegetable, or mineral kingdom, if not immediately fatal, weaken or destroy the functions of the stomach, derange the nervous system, and bring on nervous diseases; so certainly are the digestive organs the first to suffer, and stand from their office as centinels of life.

Bleeding. Numbers of persons labouring under nervous debilities, attribute the first appearance of their malady to large bleedings, or evacuations of blood from other causes. No fact is better known to the medical observer than that frequent convulsions are a common consequence of the large loss of blood. The nice connection between the circulating and nervous systems, cannot be well explained, but they act reciprocally on one another. It is equally clearly ascertained, that men or women of the nervous temperament, bear the loss of blood ill. Indeed it seldom or never happens, that their diseases indicate the practice: when done, it has commonly been through the ignorance of some stupid attendant. Abortions, and severe floodings after child-birth, are often traced as

the beginning of painful and lingering nervous affections, that sometimes remain for life.

Reflections on Medicines. Physicians having wisely drawn the line between medicine and diet, the former can only be indicated in some of the diseased conditions of the body. There are a multitude of articles in *materia medica*, beyond what I have thought proper to animadvert on here, possessing equal activity to those enumerated. Some of these may be supposed to have a chemical agency on both the solids and fluids; while others appear to act more immediately on our sentient parts. It is evident, then, from the most accurate observations, that such substances ought to be exhibited with great caution, and their operations watched with the most punctual attention. Many of the metallic salts, the mineral acids, all the alkalis, some of the neutral salts, and many simple remedies taken from the vegetable kingdom, are of this description. The nicest study of the physician must be that at the bed-side of his patient; in observing the phenomena of disease; developing the genius of a distemper; unfolding peculiarities of consti-

tution; selecting medicines for these indications of cure, and discerning their action and appreciating their power, that he may be enabled to proceed on the same plan of treatment, or adopt another. Nature has endowed so few minds with that superior intelligence of being equal to this task, that we cannot be surprised when told, that medicine is still in many respects "*a conjectural art.*" Where men do not all possess the same sagacity, cultivated talents, and extensive acquirements, they must think and reason differently, on subjects which bear no resemblance to other human pursuits; and concerning which no appeal can be made, without overstepping the bounds which divine Providence has prescribed for the ingenuity of mankind.

CHAPTER IV.

Influence of these diseases on the character of nations, and on domestic happiness.

It is a fact fully confirmed in the history of mankind, that a similarity of manners has marked all nations, in their progress from rudeness to refinement; in their rise and in their decline. An infant state is commonly poor: but from intercourse with its neighbours, it learns the advantages of a change of produce and commodities; and this traffic soon gives spring to ingenuity, and birth to adventure. Amidst its articles of utility, it also imports some that are showy and elegant: the arts of inventing new sources of gain, being natural to the human mind, gradually extend; till luxury in all its shapes, appears in the manners, amusements, and government of every commercial people. The arms of imperial Rome subdued the world, and made that city the emporium of wealth and grandeur, drawn from all other nations.

Luxury, crimes, and irreligion, were soon the consequences of power overgrown, and riches unbounded. And this haughty, wicked people, when they had lost their moral virtue and dignity, and with these, their physical strength, became a prey to barbarous hordes; who, undebauched by refined pleasures, found the enervated Romans an easy conquest. Let Great Britain look to this example. The East and West Indies at this moment, are a theatre of oppression and slavery, to gorge her with commercial wealth; and a district of Africa, larger than Europe, is made a field of blood, to purchase the natives for cultivating her colonies, whose produce only tends to weaken her manly character, and overwhelm her with nervous infirmities! *

The rise and fall of a large commercial town, may be taken as an example of a na-

* Since this work was printed, the Parliament of this country, after twenty years hesitation, has abolished the hellish slave trade. This act was chiefly owing to Mr Fox making it a ministerial question. Thou persecuted statesman! this deed will embalm thy memory while christianity is our national religion; and thy meek spirit will find its reward in Abraham's bosom!

tion. From a few fishermen's huts, on some river, or arm of the sea, it gradually extends and improves, till the exchange for business, and the theatre for amusement, become its ornaments. A narrow port is by degrees, widened into a capacious harbour: and the warehouse, manufactory and shop, increase in proportion, till wealth and elegance dazzle in every lane and alley. The coffee-house, the inn, and the tavern, grow necessary appendages to business and pleasure: the morning begins with a bargain, and the evening closes with a banquet. Then the rout commences, to teach the young the arts of gaming: and the midnight masquerade initiates them into the wiles of intrigue. The riot disturbs sleep; the drunkard is seen staggering home, in danger of robbery and death; and the woman of the town, deserted by her destroyer, is seeking reprisals, and looking for prey in the streets. Now the hospital and bedlam appear in the suburbs; the first to receive the poor, sick, and lame; and the other to confine the more wretched in mind. The physician and apothecary are seen gliding in their chariots, with retinues sometimes not much like men who

are conversant with human affliction, and enriched by the luxuries and vices of their fellow mortals. Morals and health are alike committed in this vortex of wealth and dissipation. The industrious man who began the world with a capital of fifty pounds, who rose at five, and went to bed at nine, who dined on a plain joint and pudding, and drank nothing stronger than table beer, does not find a fortune of fifty thousand pounds exempt him from gout and nervous torments. A crowded population multiples all contagious maladies, but especially fevers of the worst kind. Fashionable pleasures, such as towns only afford, are a fruitful source of weakness and pain: and drunkenness and mercurial courses, of themselves, produce more wretchedness and disorders, than the whole natural infirmities of life. Under these circumstances, the human frame must degenerate in both body and mind, as we see in modern Egypt, Turkey, and Italy. Thus flourishes the commercial town or state, till its wealth and effeminacy weigh it down; when it falls like Tyre or Alexandria, like Corinth and Carthage, to be a retreat to robbers, and a den to wild beasts.

As we analyze the manners of society, and scrutinize those causes which lead to the diseases of which we treat, we observe their operation and influence to be very general, and daily increasing. Commercial Britain, enriched by manufacture and colonial wealth, when compared with her barbarous state, does not exhibit a nobler spirit of independence, or shew more fortitude in opposing French invasion, than what was done nineteen hundred years ago by our forefathers, in repelling the Roman legions. Our invaders were then obliged to build strong walls and ramparts to shelter them from the Britons:* but modern Britons have erected Martello towers, projected the inundation of Essex, and hoarded up the current gold coin, as tokens of being afraid of the French. These alarms are to be considered as so many symptoms of a nervous temperament appearing in our national character. Britain had no ships to oppose the landing of Julius Cæsar; but at this moment she has a navy capable of fighting the whole fleets of Europe united; yet she trembles at a

* The walls of Adrian and Severus.

flotilla of cock-boats! It is that puddle of corruption, the Stock Exchange; that Delphi of Plutus, where stock-brokers pay their vows, and expound prophecies, that has filled the nation with degenerate fears, apprehension, and hypochondriacism. Europe has been saved by the British navy from the fangs of French tyranny; yet, shameful to be told, after the fleets of France have been annihilated, we are now to be assailed by three thousand wherries, manned with *blue devils!* *

If I am altogether correct in saying, that the *nervous temperament* is hereditary, and therefore the diseases which depend

* *The gentlemen of the Stock Exchange*, as they denominate themselves, are projecting great things from the conquest of Buenos Ayres. Spain, humbled, degraded, pillaged by an imperial cut-throat, is almost blotted out of the map of Europe; which she owes to the gold and silver brought from the new world. Yet these *gentlemen* seem to entertain no fears for the like fate happening to Great Britain. Such is the patriotism of money-lenders!—Sept. 14, 1807. It is to be hoped the melancholy accounts just received from the army in South America will be some check to the avarice of these stock-jobbers: this trading expedition, it now appears, is annihilated at the expence of 2000 brave men!

upon it, liable to be extended to the offspring, they must multiply in prodigious proportion. They appear in the present age to have acquired that growth, which nothing but a general revolution among all ranks of society can check. I may be told, that these diseases are not very dangerous, and very seldom produce death; and it may be added, the bills of mortality do not justify my conclusions. These arguments are easily answered. It is true, death is seldom put down to nervous disorders: but if constant pain, mental disquietude, and apprehension of dying, are to be considered as evils in this stage of existence, then are nervous afflictions to be held as the chief cause of them. And it is to be remembered, that the most frightful part of the catalogue of diseases, such as apoplexy, palsy, madness, melancholy, epilepsy, convulsions, colic, iliac passion, atrophy and dropsy, are often ushered in by nervous affection, before they assume their own character and shape. Physical strength of body cannot be long preserved under enervating modes of living: the stature and the mind must both diminish and degenerate. The poet

says, *fortes creantur fortibus et bonis;* and very aptly adds,

..... nec imbellem feroces,
Progenerant aquilæ columbam. HOR.

An eminent senator, Sir John Sinclair, has lately made some noble attempts to regenerate the physical strength of the country, by recalling mankind to agricultural life. His institution of a society for that purpose, under the authority of Parliament, has already had considerable effect. Many noblemen and gentlemen, of great landed property, have seconded these patriotic views, and turned their attention to this national object: a spirit of improvement has appeared in every county, and is daily increasing. No man who possesses the smallest spark of love for his country, but must wish full success to the undertaking. No truth in political economy is better proved, than that a nation of sedentary people can never be a nation of heroes. We might, indeed, preserve all our manufacturing establishments, and most of the fine arts, during the degeneracy of physical courage: but could an army of man-milli-

ners defend the British islands against the ruffians of Bonaparte? * The puny inhabitants of Italy and Indostan are finer spinners of silk and cotton than Englishmen, because they are strangers to all the masculine virtues. Let us therefore beware how we extol too much the effeminate labours of the spindle and the loom. A commercial people merely, can never be an independent nation. They owe to foreigners the consumption of their manufactures; and when these chuse to do without them, or to buy them elsewhere, such a people must become bankrupts in finance. The glory and security of the united kingdom, must be to blend these pursuits, agriculture and commerce, in the national character.

From the imperfect state of the medical histories, which have come to us from the early ages of the world, we are left much in the dark, how far luxurious living and effeminate customs affected the health of nations. We are told of their vices and debaucheries arising to excess; and these seem to have generally been forerunners of

* Non his juventus orta parentibus, &c. Hor.

their fall and decline. When the form of republican government in Rome, yielded to the tyranny of the Cæsars, with it the republican virtues gave way to the vices of courts; and the Romans, soon after, lost their character for military prowess. It is therefore but fair to infer, that the faculties of soul, and the vigour of body, underwent immediate changes; and that a train of diseases of a peculiar cast, sprang up among this debased people. Hence the modern enervated inhabitant of Italy must be very unlike the ancient warlike Roman. The youth of the one is spent in learning music, painting, and frippery: the other was early trained to bear fatigue, hunger, thirst, running, leaping, swimming, &c. Diseases of the same class could not, therefore, exist, in constitutions so different in habit and predisposition. The rural life also occupied a considerable portion of time with the Roman worthies of the old republic. All the Latin classics abound with beautiful eulogies on rustic manners, scenery, and recreation, particularly Virgil, Horace, and Pliny the younger. The greatest man whom modern ages have produced, George Washington, was of this

school. How much nobler was it to retire from the command of a victorious army, after securing the independence of his country, for the study of nature in his own farm, than to live in a city to learn excise laws, and squeeze taxes from industry, to pay profligate favourites, and unprofitable wars. How mean and contemptible the upstart emperor of France appears, when compared with this truly christian hero, the friend and admiration of human kind!

The diseases of a labouring and active peasantry, or of those of any condition of mankind, exposed to the weather in all seasons, are almost confined to the inflammatory class; such as pleurisy, acute rheumatism, catarrh, cynanche, &c. These depend on a vigorous vital power, a rigid fibre, and a florid dense blood: they are a directly opposite state of the system to what predisposes to nervous diseases. No kind of diet comes wrong to the stomach of a hale rustic; the unleavened farinaceous meal, or a draught of imperfectly fermented malt liquor, that would throw the dyspeptic and bilious citizen into a colic, he takes down with impunity. He is also

capable of braving fatigue, privation of food and sleep, and every other hardship, in a manner that would soon destroy the town inhabitant. A nation that cannot recruit its soldiers from a robust and hardy peasantry, can never bring into the field an army able to endure the toils and adventures of actual war.*

Amidst the general effeminacy of manners, that is rapidly consuming the manly spirit and physical strength of this age, and which may ultimately annihilate all that is great in the character of Britons, it is somewhat consoling to observe, that the seamen of the navy, that bulwark of our liberties, will be the last of the community to feel the effect of these enervating customs. The naval officer and seaman embark in their profession while boys, before they can be acquainted with the softening arts of the day. Hardship, danger, and privation, are the lot of naval service: to brave the weather, the season, and the climate, is their delight and their duty; which, fortunately for their country, grow into habit.

* See Dr Robert Jackson, the army physician, on this subject.

Hence they have little enjoyment among the common amusements of society, and feel that kind of life hang heavy upon them, which gives no birth to action and enterprize. It is true a species of nervous disease did make its appearance during the late war. It occurred among both officers and men; but was, by no means, a general malady.* The hard duty of a stupid blockade had a chief share in its production.

Statesmen, I believe, seldom or never read the medical history of fleets and armies. They are afraid that such gloomy narratives would alarm conscience, and bring on fits of hypochondriacism.† Yet

* Med. Nautica, vol. 3.

† The fate of the *cow-pock* inoculation in this country, is a proof of the indifference of statesmen to the improvement of the health and safety of the community. It has been said, that the late minister refused to become a member of the society for encouraging *vaccination:* and his predecessor, the son of a physician, opposed the gift of 20,000l. to the immortal author of this matchless discovery, so that the *grant* was only 10,000l.! The present ministers, it is to be hoped, will retrieve the credit of the nation, by bestowing the merited honours and rewards due to Dr Jenner. See also the fate of this discovery in a branch of the public service, Med. Naut. vol. 3. Since the first edition of this

by these means, they might be made wiser ministers, if not better men. The practice of *blockade* has crept much into our naval system of late; yet it was abhorred by Howe and Nelson, as inconsistent with the genius of our seamanship. But though it may be conducted with ease in the equal weather between the tropics, it can never be effective in the stormy seasons of European seas. Such a mode of service is calculated to please underwriters and stock-brokers, but it can never be acceptable to the officer and seaman. A duty so severe, without variety to give spring to adventure, benumbs the faculties, exhausts the bodily powers, and in habits predisposed, brings on a nervous irritability that shortens the span of life.

It has been gravely asserted, and with much probability of truth, that during the reign of *terror* in France, in the late revolution, a period marked by fury and blood

work was published, a parliamentary gift of 20,000l. has been bestowed on my learned friend; in which grant Mr Chancellor Percival found himself in the *minority*, to the eternal honour of the present House of Commons.

beyond whatever was known in a civilized country, all diseases, usually called nervous, low spirits, or hypochondriacism, quickly disappeared. These diseases are so nearly connected with the tenor of the mind, that great commotions in the moral world may both induce and remove them. But if, as we contend, they are chiefly the offspring of a life of sloth and inaction, violent popular tumults, that rouse anarchy and ferocious passions, and let loose the furies among mankind, cannot fail of making strong impressions on the timid and desponding. All physicians conversant with these distempers, are aware, that a corresponding train of thought attends the bodily disorder; and that it is a preliminary step to the cure, to infuse activity of mind, so as to force new ideas on the patient. We have heard of a fit of the gout being instantly cured by the alarm of fire; and the person confined, throwing his crutches away to escape from the danger. Nervous persons, in different families, have been suddenly relieved by unexpected good fortune coming upon their near relatives; and the indisposition has again recurred by the return of a fresh disaster: and all

strong emotions while they last, have more or less the same effect in suspending or removing both the mental and corporeal ailment.

The South Sea scheme of 1720, that bubble of commercial speculation, gives a curious example of the English character. It was remarked at that time, that more instances of madness appeared, than at any former period.* In short, numbers became maniacs, from the sudden wealth which fell to them: these were probably of the nervous temperament. The transition was too great and quick for the sensibility of particular constitutions. This scheme having soon failed, it is likely that hypochondriacism and low spirits would succeed to an equally sudden reverse of fortune; but of this we are not told.

A naval officer, while abroad in the late war, received a letter from his sister, telling him, that his ticket in the lottery had come up a prize of 20,000*l.* He was so elated with the news, that he became instantly delirious; leaped from a wardroom window into the sea, and was drowned. The

* Dr Mead.

Athenian soldier, who ran to the city covered with dust and blood, to announce the victory of Marathon, was so overpowered at the event, that he could only call out, "*Rejoice with the victors,*" and immediately expired. In like manner the Roman mother died suddenly, on hearing that her son had survived the battle of Cannæ. It is probable all these persons were of the nervous temperament, from being subject to such violent emotions. Bad news, such as the death of wives and husbands, or of children, however suddenly told, or happening unexpectedly, do not seem to operate like excessive joy. Grief is slow in producing derangement of mind; and is nearer to what we call the *mild delirium:* while the frenzy of joy partakes more of the *delirium ferox.* I have observed something like temporary insanity, in several officers, who had at once been elevated from extreme poverty to a fortune, by prize-money. Men who have been wealthy, and afterwards reduced to indigence, often sink into despondency and low spirits. But it is also true, that persons who have unexpectedly received great riches or legacies, are apt to turn hypochondriacal by

being lulled into ease and security, and having no longer cause for action and enterprize. I have known habitual drunkenness in a family, that brought on some of the most afflicting nervous symptoms, completely overcome on a signal misfortune befalling a brother; and nothing beyond water used afterwards. Such a fact totally disproves the reasoning of those physicians, who tell us it is dangerous to subtract the stimulus all at once. The mind that is stable, by a firm nervous system, is little shook by the incidents of life: whereas the fickle constitution of nerves bears unequally every vicissitude; but sustains sorrow and disappointment, better than joy and good fortune. Thus the moral propensities are to be learned from the physical habit; and the peculiar genius of diseases, unfolded by the passions of the individual.

The *nervous temperament*, abstractedly considered, is often the seat of dispositions, that appear in two extremes; and giving birth to passions of the most opposite kind. Under the government of a bad heart, it is ferociously cruel, or abjectly timid. When men possessing these traits of character,

happen to be armed with power, they become the scourges and butchers of mankind. Such we suspect to have been the temperament of all those tyrants, whose reigns have been marked by murder and outrage, in the history of nations.* The present ruler of a neighbouring people, appears to be a man answering to this description. He is said to be subject, at times, to the deepest hypochondriacal glooms; and while under their influence, his temper exhibits more of the demon than the human being. Jealous of his personal safety, even to timidity, because he is aware that his plans of ambition are to be effected by blood, and accomplished by perfidy, he knows that he cannot be beloved. Through slaughter and fraud, he has waded to a throne: and his obtaining the sceptre, was the signal to shut the gates of mercy against his species. A stranger to every domestic enjoyment; unsuscepti-

* Such were Philip, Alexander, and Julius Cæsar. Philip and Alexander were great drunkards, and consequently nervous, versatile, and dyspeptic. And Plutarch informs us, that Cæsar was subject to violent head-achs, and frequent fits of epilepsy, a disease of the nervous temperament.

ble of the tender passion; and aloof from all the temperate and soothing pleasures, which sweeten the slumbers of a good man in power and prosperity, this arch-tyrant is said never to sleep two nights in the same bed, from the dread of assassination. When any sudden disaster befals his projects, without a single virtue to cheer his reflections, he becomes his own tormentor: his bowels are wrung with spasms; the biliary ducts partake of the commotion; and a jaundiced hue of the eye indicates to the spectator, the features of some devil that has usurped the human form. Under this sombre cast of countenance, his vindictive passions brood over crimes, and hatch plots, that he may find victims to glut his desire for blood. In such moods, he sends to the guillotine, incarcerates, or proscribes the devoted royalists of France; anticipates in their fate the doom of Englishmen; and feels in miniature that gratification, which he longs to experience by the invasion of Great Britain. History tells us of bad men that were born with teeth in their jaws, and of others, whose hearts were found hairy: such relations are amiable, even if they arose from the folly of superstition, as they

imply the hideousness and detestation of vice: and future ages may inquire with avidity, for the physiological structure of that breast which was so superlatively steeled, and possessed passions so transcendently cruel, above what is recorded of the common destroyers of mankind.

At the head of a military banditti, and at a period when the meek spirit of christianity ought to have sheathed the sword, he has converted civilized war into a system of murder and pillage. The governments of Europe, dwindled into dotage, have fallen an easy prey to an intriguing conqueror; who, like Philip, has accomplished by bribery, what he could not effect by arms. And one of the degraded monarchies, in order to save itself from final ruin, has been mean enough to sacrifice a princess of its royal house, to the embraces of this blood-stained monster; when in the extacy of blasphemy he was addressing heaven to give him progeny, that he might extend the career of his crimes to a future age. Such a connection was not capable of softening a temper seared by fortune, and rendered callous by repetition of extraordinary luck; and

Spain, the present field of his ravages, has found her horrors multiplied beyond example; and the blood of her babes and her young women is now painting the last scene which murder and violence can inflict on human nature!

But it must be unfortunate for any nation to be governed by a man of capricious temper, even though his passions are gentle and mild. A nervous statesman could not easily divest his public measures of some portion of his consitutional dispositions. He would at times view things through a false medium: and by judging from mistaken premises, would conduct the business of government with imbecility and supineness, and bring it into contempt. Every plan he devised would partake of the mood he happened to be in at the moment: it would be liable to defeat, and exposed to opposition; in hazard of being divulged before execution, and open to derision. The morbid sensibility of a deluded hypochondriac, might alarm a people by imaginary dangers; and in the season of disaster, might bring ruin on affairs by irresolution and despondency. By such men nations have been plunged into un-

necessary wars; and inglorious peace has been concluded, when advantageous terms might have been obtained. Men endued with an exquisitely nervous temperament, ought to be banished from the councils of all sovereigns, however respectable their talents; for consistency and fortitude are incompatible with their physical character.

In the medical profession, the nervous temperament might also so affect the practice of the physician, as to render it feeble, fluctuating, and irresolute. Diseases often take most unaccountable turns, not to be foreseen or prevented by human abilities. Such sudden changes not only require firmness of mind and address, on the part of the attending physician; but his conduct and example may so affect the patient, as to bring on a fatal despondency. Hence the value of confidence in the medical friend. To a sick person, who thinks himself in danger, nothing is so distressing, as to behold fear and distrust in the countenance and deportment of his medical director: a nervous frame is therefore very inadequate to some situations of this office.

But in the common transactions of life, nervous people are difficult to be managed.

Their tempers are fickle, their spirits unequal, and their attachments equivocal. In business they are indecisive, unsteady, and impracticable. Their friendships are often puerlish, and their resentments unmanly. Amidst domestic connections, they are apt to teaze their relatives by the observance of trifles; while concerns of importance are frequently degraded by an ill-timed levity. Much of their time therefore is spent in making concessions to others, for the inordinate ebullitions of passion; or in torturing themselves by groundless fears, or imaginary affronts. At one moment, you find them obsequious and compliant; grateful for correction, and gentle on being reminded of their duty. But this even tenor seldom lasts long; and they grow impatient of contradiction, and furious from restraint. These transitions are commonly sudden: the same wavering and capricious principle of action, appears to direct alike the healthful and the morbid state. We behold them one day, taking leave of their friends with all the solemnity and earnestness of dying men; and in imagination suffering worse than death: while on the next, they will be seen plunged

into dissipation, fascinated with pleasure, and attending every fashionable amusement.

On the other hand, the *nervous temperament* is often found to be the soil of numerous virtues: the noblest feelings are cherished here. Sensibility to excess marks the constitution; and affliction cannot address it without meeting its sympathy. It is this degree of feeling, that too often makes it the sport and victim of passion. It loves and hates beyond bound. Hence those corroding sorrows, which sometimes overtake the most tender of all attachments, and which ultimately bring the possessor to the grave. In adverse circumstances nervous people easily despond, and sink under misfortunes, which if opposed by patience and firmness, might be happily overcome. In this temperament of the sentient system, a genius for the elegant arts chiefly originates. The poet, painter, and musician, may be justly styled *genus irritable vatum*. We here meet with the whole eccentricities of superior endowments, often blended with the most abject pursuits; sublimity and debasement frequently mixed in the same character. Cheyne, in his

English Malady, facetiously remarks, " I " seldom ever observed a heavy, dull, " earthy, clod-pated clown much troubled " with nervous disorders, or at least, not " to any eminent degree; and I scarce be- " lieve the thing possible, from the animal " economy and the present laws of na- " ture."—p. 180.

On the whole the influence of these diseases is often great on national character, and domestic happiness. When wealth and luxury arrive at a certain pitch in any country, mankind cannot remain long stationary in mental qualifications or corporeal strength. Domestic peace is first invaded by asperity of temper and turbulent passions. Vices and diseases are close attendants on riches and high living. All these gradually extend among the community; and the circle widens, till it engulphs a whole people; when polished society may be said to bring on its own *dotage*, and to dig its own *grave!*

CHAPTER V.

History and progress of these diseases.

A METHODICAL history of these diseases, at least a narrative of the symptoms as they appear in succession, is almost impossible. They assume such variety in form and manner, in different persons, that we look in vain for regular order. The only thing certain and peculiar in their character is *predisposition;* which may be divided into *hereditary and acquired.*

1. By *hereditary predisposition* is to be understood an original conformation of body, transmitted from the parent to the offspring; by reason of which, when particular exciting causes are applied, a similar train of morbid phenomena takes place. A predisposition may therefore appear long before any symptom of actual disease has shewn itself: as in the phthisically disposed, a person will be easily affected by weather and sudden changes of tempera-

ture; and on slight occasions, liable to cough, hoarseness, tightness or stitches of the breast, &c. The hereditary disposition to the diseases in question, may be marked in the first stages of infancy in many cases: in others not till a later period, or till particular causes bring forth the latent peculiarity. The child born of nervous parents, that is to say, persons of weak digestive organs, and irritable nervous system, subject to bilious and spasmodic complaints, &c. will, at the breast, be very liable to bowel affections, such as cardialgia, flatulence, constipation, or diarrhœa, gripes, yellow gum or jaundice, &c. These will be apt to come on from slight occasions, as when the milk of the nurse is affected, either by her passions or improprieties of diet, or when any thing has entered its food that is difficult of solution in the stomach. These causes will frequently operate with such effect, and to such a degree, as to induce convulsions and death.

As the child grows up, the tendency to these complaints will be more perceptible, on slight deviations from its regular modes of living. If it meet with badly fermented bread, heavy pudding, eat too freely of

fruit, sweetmeats, pye-crust, all kinds of pastry, pound cake; or drink of cyder, perry, beer, wine, punch, &c. the stomach and bowels will be quickly disordered. At the same time a peevishness and fretfulness of temper will appear, extreme irritability, want of sleep, sleep disturbed, with other nervous symptoms, till the offending cause has been corrected in the first passages.

In some of the diseases of infancy, such a child will suffer more than other children. At the teething period, it will be more likely to be seized with bowel disorders and convulsions: in the eruptive fever of the small pox, it will be more prone to these fits: and in the hooping cough, as being a spasmodic disease, the nervous infant will be a severe sufferer. Frights of all kinds, that ruffle the temper, and impatience under bodily pain, will be attended with irritable passions. Worms are the consequence of weak bowels and disordered digestion; a child of this description will therefore be much troubled with worms, and generally their most troublesome symptoms. These symptoms will sometimes put on all the appearance of a

confirmed *hydrocephalus internus*, even to the last degree of strabismus. I have seen so many instances of recovery from this apparently hopeless state, that I am disposed to refer the whole to these intestinal vermin, or to some aggravated attack of stomach affection, depending on original nervous predisposition. It appears indeed to me, from a multitude of cases, that this disease is purely the offspring of this temperament; and when fluid is found in the ventricles of the brain, it is to be considered as the *effect* rather than the *cause;* for death has often happened where no water could be detected.*

At the age of *puberty*, if a female, it will be liable to be affected with that disease usually called *chlorosis;* which, besides so many symptoms of dyspepsia, combines with it the *emansio mensium*. The *chorea*, or St. Vitus's dance, also appears about this age: and in numerous cases which I have seen of both complaints, I am disposed to think, that they *never* occur without manifest predisposition, and are therefore to be considered rather as symptoms of the nervous temperament, than distinct

* Vide Appendix.

diseases.* The changes which now take place in the constitution, conjoined to the quick growth of the body at the same time, will render this a most critical period. At this season, the nervous woman is first affected with hysterics; these added to many painful symptoms of increased irritability, will be apt to recur at *distinct intervals*, through life, particularly if unmarried. Extreme delicacy of stomach, dyspeptic affections, and what are called bilious, dysuria, leucorrhœa, hemicrania, &c. with other nervous signs, will be the lot of this hereditary predisposition.

The female that is born of *gouty* parents, comes entirely within this description. The fact is notorious, that what is called *regular gout*, or gout shewing itself in the extremities of the body, seldom attacks the fair sex: and when it happens, the woman is marked by a more masculine form, or other external signs indicating this peculi-

* I have at present a case of chorea under my care, in a lady of 14, whose voice is nearly gone; but I have no doubt of her perfect recovery. March, 1810. This young lady is now well. May, 1810. I never knew a person die of this disease; and it has given birth to much false importance in the profession, by disappearing after the use of pretended remedies.

arity. But even this will not explain why the female is so seldom affected with arthritic inflammation. Something may perhaps be sought in the generative faculty: the *castratos* are said to be exempt from gout: regular gout is very rare before the age of puberty; and all the women whom I have known subject to inflammatory gout, except one, had never borne children. Gout, in all its shapes, is preceded by stomach affection; so also is the *period*. Again, the stomach recovers as the pain and inflammation fix in the joints; and if they prematurely recede, the affection of the stomach returns. It is the same with the *period*: when one goes on properly, the other declines in due time: and if cold, passions of the mind, or other causes, bring on a sudden stoppage, all the complaints of the digestive powers instantly recur.

But as the dyspeptic symptoms which attend gout, are so much alike in both sexes, making allowance for the greater sensibility of the female, they strongly support the idea, that the chylopoetic viscera are the *original seat* of this disease; and these the primary symptoms of gouty diathesis. The child therefore, who is born of arthritic parents, has in its constitution

what may be called the predisposition to nervous and bilious diseases. In infancy it is prone to all stomach and bowel complaints from slight causes, as have been described, and these will be its attendants through life. Even the man of the gouty family will not be exempt from this disposition to be dyspeptic and bilious, on every kind of excess or improper indulgence. In both sexes, they show a stronger tendency, as they appear early; for that proves a weaker structure of the digestive powers, and greater debility of frame; just as gout is to be more dreaded in proportion to its attack at an early age. Thus the youngest votaries of Venus and Bacchus will run greater hazards of immature gout, and premature decrepitude as a consequence.

2. The other division of predisposition to these diseases, is the *acquired predisposition*, or what may be brought on by causes which especially weaken the frame of nerves, and the chylopoetic organs. This predisposition may take root, even during the earliest stages of infancy, in children born of the healthiest parents. The effects of the milk of an unwholesome nurse often lay this foundation. It may happen when the child is not sufficiently nourished;

where the nurse is much affected with the disorders herself; if she drink too freely of spiritous or fermented liquors, or be in the habit of taking opium or other drugs. Bad lodgings; impure air; hot rooms; chills from exposure to cold; washing the infant in water too cold or too hot; want of cleanliness; dosing it with hot things, whether spirits or aromatics; frequent opiates in any form to make it sleep; the use of tea; deficient exercise; sweetmeats; frequent recourse to medicines, such as emetics, and purgatives, but particularly calomel: and if these articles are often repeated at any stage of childhood, unless competently prescribed, they must infallibly debilitate the stomach and bowels, and induce the diseases in question. To all these causes may be added, the effect which the furious passions of some women have on the infant they suckle. But even children at an early age, are not beyond the reach of moral causes, particularly females, and these will often operate with great force on sensible minds.

The girl whose health has been thus ruined by improper nursing in infancy, or bad treatment in childhood, will be apt to

suffer at *puberty*, and at the *change of life*. At the former period, violent hysteric and chlorotic affections will commence, and health will be precarious for a length of time. Such a woman will be generally liable to sterility from constitutional infirmities; to abortion in the early months, and to premature births: these will often happen from slight causes; and much danger will be encountered during parturition and in the puerperal state. Other diseases of equal delicacy, which are too often the bane of female life, will be the portion of such a woman. These girls acquire an inactive, sedentary turn in early age, which is seldom overcome; they seem to vegetate rather than live, and but rarely reach to fifty years. When women of this kind of habit suckle their own offspring, or that of others, they much injure the health of the infant as well as themselves: such children commonly die in great proportion under two years; and if they survive that age, it is with indelible marks of a puny and vitiated constitution. Among the poor in large towns, the proportion of deaths in infancy is great, chiefly owing to vicious nursing; and much caused by that

nervous weakness brought on by the use of tea and spiritous liquors.

The *acquired predisposition* is also the frequent effect of preceding diseases and confinement; such as typhus fever, and all the fevers of tropical climates. Luxurious living, and highly seasoned food, that weaken and exhaust the digestive powers: excess of animal pleasure; courses of active medicines long continued; suckling the babe till weakness and emaciation take place; severe labours; hæmorrhages; disappointed love, revenge, or ambition; confinement in impure air; want of exercise; intense thought; long protracted grief; frights; a long state of suspense in waiting the decision of some important event; the improper use of opium; fumes of metals, as quicksilver, lead, or copper; spiritous liquors, and other narcotics; poisons of every kind in small doses; and in short whatever greatly disturbs or debilitates the whole nervous system and abdominal viscera.

Wounds and injuries of the head, concussions of the brain, and whatever may induce effusion and compression, so as to weaken the organs of sense and motion, or

render them unequal in their action, sometimes bring on a nervous temperament, or at least pave the way to these diseases. These incidents are common enough among our seamen and soldiers, and now and then to be met with in private life.*

Having now fully described the nature of predisposition under these forms, we are prepared to relate, what, in common language, goes by the name of a *nervous complaint*, or a *bilious attack;* expressions frequently heard among all kinds of people. But without predisposition in some degree, it is to be presumed, that no person has at once been severely afflicted with these diseases. The two kinds of predisposition which have been investigated, constitute what modern physicians have called the NERVOUS TEMPERAMENT, for it is not mentioned by old writers.

A person subject to *nervous or bilious complaints*, has commonly some warning of an aggravation of the symptoms, or of an *attack*. Some uneven tenor of the spirits;

* Convulsions in the form of epileptic fits, are common enough after organic lesions of the brain. They have been frequently relieved by the trepan.

something to ruffle the temper or passions; or some irregularity in diet, most frequently precedes them. In the sex, these complaints, for the most part, commence near the *period*, and when not severe, decline with it. A frequent desire of micturition, or a profuse discharge of limpid urine, very often ushers in the attack, in both sexes.

The patient himself finds it difficult to describe his uneasy sensations, for want of language: he knows not with what symptom to begin, though he will answer the questions of the physician with sufficient correctness. The physician therefore, finds advantage in putting queries to the patient, as a few leading ones will often save both much embarrassment and conversation. The mind is irritable, fickle, and apprehensive; at one moment, tenacious of impressions, suspicious and jealous of contradiction; at another, hurrying from one thing to another: grave and gay by turns; with fits of crying, laughing and incoherent talking; but seldom indulging in conversation that is unconnected with the consultation. The desire for food commonly fails; an unpleasant taste is perceived, which excites frequent spitting;

sickness at stomach sometimes comes on very suddenly, with vomiting of green sour mucus, or of bilious matter. What is thrown up is often found so acrid and corrosive as to excoriate the throat and mouth, and slightly tinge silver; the fauces and tongue have been blistered from this cause, so as to appear full of pimples, or little ulcers, that render mastication of the food painful, and deglutition impracticable. The bowels are generally irregular, either constipated or the contrary, and oppressed with flatulence. Acidity, eructations, and dyspnœa, spasmodic twitches about the breast, back and loins, accompany these feelings. It is often surprising to see the degree of inflammation of stomach at this time; coming on suddenly, and remaining for hours. The skin is dry, and constricted, or in profuse sweats; the whole surface of the body unusually cold, or uncommonly hot by turns; with vertigo, tremors, risings in the gullet, or eructation, and vast depression of spirits. The patients are extremely sensible to the changes of weather, and bear easterly winds ill.

The countenance is commonly downcast and sallow; and the white of the eye ex-

hibits, more or less, a bilious tinge. Few dyspeptic persons have at all times a clear complexion; indeed the looks are a sure criterion to judge of the habit. This suffusion of bile sometimes amounts to real jaundice, transitory, or more permanent; and attended with pain about the epigastric region, extending upwards from the liver to the shoulder, and generally with constipation. These icteritial symptoms are speedily moved by laxatives, though brisk purges may be necessary, with which considerable quantities of inspissated bile and mucus are brought away, and also *biliary calculi*, called gall-stones, which sometimes obstruct the ducts.

Passions of the mind, or whatever greatly and suddenly disturbs the digestive powers, bring on jaundice. But the sallow complexion of the nervous temperament, is not always expressive of bile being carried into the blood. It probably originates also from imperfect sanguification; and when the florid colour is deficient from subtraction of oxygen, or oxygen not duly supplied. When the yellow tinge of the eye proceeds from bile, it may be detected by dipping a thread or linen rag into the urine,

which will be stained yellow. I think women are much more liable than men, to the spasmodic form of this complaint; which may arise from their weaker state of bowels, and greater irritability of nervous system.

The liver itself is capricious in its office: we perceive at one time, a suspension of the biliary secretion, when no obstruction of the ducts is to be suspected; and at another, the bile is flowing in great profusion, so as to regurgitate by the pylorus, and be evacuated in quantity by vomiting; while it passes by the other way in increased proportion. Warm seasons are known to produce this effect on the liver of nervous people.

A particular lassitude, listlessness, and inaptitude to all kinds of motion, and mental exertion, are common attendants of these affections. The patients will sit for hours in the same posture, without paying the least attention to what is going on around them. Even the calls of hunger are disregarded, and without force they are not roused from their *reverie* and *ennui*, to take food. The hearing is often very acute; and sudden noise is apt to excite great agitation and alarm: but dulness of

hearing, even to total deafness, is common enough in these complaints.

Convulsive *asthma*, often recurring periodically, is to be enumerated among the attacks of these diseases. Indeed the true asthma is perhaps never met with, but in constitutions of great nervous irritability. Such to a certainty must be that species of it which is induced by particular smells. I knew a lady, who was always seized with asthma, whenever rad. ipecac. was pounding in the shop; so sensible was she of this effect, that it was in vain to conceal from her what was going on in the mortar. Cases of this kind are also mentioned in the London Medical and Physical Journals for January and June 1809, and April 1810.

When spasms assail the *kidnies*, there is often much acute pain in the loins; increased on moving the body, and lying on a soft feather bed; extending downwards by the ureter to the bladder, occasioning constant or very frequent desire to make water; producing the symptom called strangury; sometimes with a pain of the mammæ in women, or retraction and pain in the testes in men, and a numbness

of the thigh and leg. The irritability in these parts is often so considerable, as to force blood from the passage of the urethra: the urine is even at times totally suppressed, and obliged to be evacuated by a catheter. When the urine is made in small quantities, it is high coloured, letting fall a copious muddy sediment; but at intervals it is voided in great profusion, and pale as common water.* The urine not unfrequently deposits an uncommon quantity of mucous sediment, sometimes streaked with blood; at other times more dark coloured and even black. The stools also, are occasionally, in a great measure, composed of mucous matter. I know some gentlemen who experience these discharges on every attack of indigestion; and independent of any preceding venereal affection.

When great flatulence and distention accompany these shades of the complaints in the urinary passages, a very uncouth appellation has been bestowed on them, viz. *windy gravel.* Though an odd kind of term, it would seem to convey a very emphatic meaning of the patient's feelings.

* Diabetes Hystericus.

Pain and fulness of the mammæ in some women usually accompany the *period:* but these pains have at other times continued for months; and I have met with instances, wherein the female was subjected to severe courses of medicine, under the idea of impending cancerous disposition. Such affections often arise from pure nervous sympathy, and yield to proper treatment. I have also known swellings of the testes, and other pains of the male genitals, treated by incautious medical people, as Lues Venerea; which to me appeared to originate from a nervous temperament, and yielded to a treatment that strengthened the digestive powers. What is called *seminal weakness*, is a part of these complaints, in which cases, delicate and ignorant persons are too apt to trust themselves in the hands of the most unprincipled of all *quacks*, till their health is completely ruined.

Weakness of the eyes, even to total blindness, being a common attendant of nervous debility, has sometimes been mistaken for other diseases, and a mercurial course administered not only without relief, but adding to the malady.

Though at times the appetite for food is

deficient, yet at another time, it is excessive, and craving after many out-o-the-way things. Hence those longings that occasion great anxiety to the patients and all about them; as there is commonly a necessity for indulging them more or less. Deficient appetite, and other impediments to chylification, sometimes disappear on eruptions coming upon the skin, and alternate with them. It is commonly judged prudent not to repel these; as it is held dangerous to dry up issues at once, or any other drain.

There is often acute pain about the region of the stomach, bending the body forward; it gets the name of *cramp*, and is attended with vast dejection of spirits, and syncope. This ought always to be considered an alarming symptom; and I have generally found such cases terminate fatally on a sudden. But fainting fits otherwise indicate little danger: women frequently fall down without any warning, and recover in a few minutes as if nothing had happened. It has been told of different persons remaining for a number days without external signs of life; a situation which never came within my knowledge, and almost exceeds my belief. Dr Cheyne re-

lates the case of Colonel Townshend, who had such command over the vital functions, that he could suspend them at will, or die when he pleased, and recover again. In the company of another physician, he saw this officer go through the experiment and recover himself: but Col. T. did not long survive these interesting trials.

Worms are common enough in all stages of these diseases, but are particularly so among women and children, as the consequence of a weak condition of bowels and impaired digestion. The symptoms which point out the presence of worms in the body, are chiefly of the nervous kind; but urine of a chylous consistence and colour, or resembling milk, is seldom known but from this cause. Itching of the nose; gnashing the teeth; starting suddenly from sleep; change of colour in the face; foul breath, &c. sometimes accompanied with fever and convulsions, all denote worms.

It is probable that the disease called *colic*, is only an attack of these affections in a particular part of the intestines. The *ileus, or iliac passion*, is the last degree of this afflicting disorder; which consists of an inverted action of the whole intestinal

tube, so as even to evacuate clysters by the mouth.

From the excessive thirst observed in some cases of nervous affection, it would appear there must be at times an uncommon consumption of liquid in the stomach, whether from the increased action of the absorbents, or other causes. This great absorption, in the first passages, is one way to explain the attending constipation; as the more fluid parts being taken up, the remainder is propelled with more difficulty. I knew a lady who was so tormented with *polydipsia*, that a pitcher of water was carried with her in her rides.

Uneasy flutterings, as they are called, about the breast, and palpitations, with the sense of a ball rising to the throat, and there giving the feeling of strangulation, form what has been named *globus hystericus*. In these the patient grows vertiginous, and blind, and falls down, often in violent agitations and convulsions, with loud screams, and looks expressive of horror. This paroxysm is most apt to be brought on by surprise, a fright, or whatever excites strong and sudden emotions: loss of voice, for a time, is a common con-

sequence. But vertigo continuing for days together, is not unusual, and it commonly attends some excessive degree of flatulence and acidity of stomach. This fit was long thought peculiar to the fair sex; but Dr Sydenham mentions it as occurring among men; and it is certain that many males of very mobile habits, and gouty constitutions, where there is great sensibility of the first passages, are very liable to it. I have known it in numberless instances among naval officers, especially those who had suffered in warm climates; and also among seamen, as told in my 3d volume of Med. Naut. 2d edition.

That species of convulsion called *epilepsy*, can scarcely be said to differ from the hysteric affection, unless in its violence. They both occur in a similar temperament of body, and are brought on by the same causes; and it is agreed by physicians, that the necessary steps to the cure of both are alike; that is, to correct the predisposition.

I have also seen a considerable number of cases of nervous affection, with all the signs which are said to mark *angina pectoris*. This complaint has been thought to

accompany particular organic affections of the heart and large blood vessels; some of these I have seen, and they proved fatal. Of this kind was the case of the late Captain Fisher, of the Powerful. But these organic derangements could not be the cause of the symptoms, in cases which quickly recovered under appropriate treatment. Two of these I have met with in Newcastle. I cannot therefore help being of opinion, that the anomalous form of the diseases under discussion, renders it very probable, that they have often given cause for unnecessary alarm, as resembling what has been styled *angina pectoris*. Some forms of nervous affection bear so strong a resemblance to an ague, that I have frequently known them to be treated as such; and violent remedies administered under the idea of their obstinacy. But a careful scrutiny of the predisposition is the best method for correcting the errors of the practice.

It is not easy to combat the fancies and apprehensions of nervous people, when under strong paroxysms of their disease; while these last, they are to be considered as alienations of mind, and treated accord-

ingly. In some situations of this kind, the flatulence is unusually troublesome, and so fluctuating in its movements over the abdomen, that the sensation of air or wind, rising upwards to the brain, is among the most solemn beliefs of the patient. This fanciful idea has given birth to the phrase *vapors*, a name for weak nerves. These vapors are therefore said to generate every thing in the brain that is *terrific or ridiculous*. Hence *blue devils, ghosts, and hobgoblins*, have been conjured up to the affrighted imagination of the patient; and bad men are said to suffer under their influence, torments compared with the pains of hell: so faithful and certain are the admonitions of conscience! Sleep disturbed and harassed by dreams of the most frightful sort, such as falling down precipices, suffering shipwreck, being devoured by wild beasts, are common enough on these unhappy occasions. Some histories of the effects of vapors, are as old as the days of Galen. Are *noct-ambuli* of the nervous temperament?

Another train of tormenting symptoms are those head-aches which accompany nervous disorders. Sometimes only one

side of the head is affected, and the pain receives the name of *hemicrania:* when it is in the forehead, and gives the sensation of a nail being driven into the bone, it has been called *clavus hystericus*, as being peculiar to the hysterical. But this last kind of pain is not more confined to women than the *globus;* males are also subject to it. A nervous head-ache in the occiput, is often attended with a sense of coldness; as if very cold water, or a current of cold air, was poured upon the part. Vertigo, to such a degree as to make the patient fall down, dimness of sight, *tinnitus aurium*, partial or total deafness, are associated with these complaints. These head-aches frequently seize persons at regular intervals, and have obtained the name of *periodical head-aches.* Accessions and intermissions of pain, that acquire regular movements, must depend on some important law of the system; and here they are probably directed by the digestive process. A sensation of fulness of the blood vessels, also frequently attends nervous head-ache. This has led to the employment of blood-letting; but without much relief: and

often, with much increase of the pain, as a consequence of loss of blood.

To this class of symptoms may also be referred, that singular and obstinate pain of the face, called *dolor facei*, or *tic doloreux*, by the French. It is said to have been once cured by Dr Haighton of London, by dividing a branch of the *fifth pair* of nerves, which was supposed to be the seat of the pain. But medicine must become a bloody art indeed, if the organs of sense and motion are to become subjects of surgical operations. Flatulence, constipation, and nervous feelings, are known to be attendants of this pain: it affects chiefly women, and those above thirty; but it is not confined to a particular spot of the face. It is doubtful to me, whether this tormenting affection is ever met with but in the nervous constitution; at least in such only has it come under my observation. I cannot therefore see any reason for considering it a distinct disease; for it has always been relieved by the general method of cure, though it is apt to return.

Pains, cramps, and contractions of the joints and muscular parts, are not uncom-

mon symptoms: but the most painful are those of the calves of the legs and soles of the feet. I have a patient now, a man of large size, who is drawn to one side, and the muscles of the abdomen contracted into irregular lumps. This man is strongly affected with hypochondriacism, is jealous of his safety, and asks my servants if they ever hear their master speak of him.* He inherits the temperament from his mother. Coldness and numbness of the extremities, even to paralysis, sometimes accompany the stomach affection of nervous people; but commonly yield to the remedies of the primary disease.

Persons subject to these diseases are very liable in advanced life to hæmorrhoidal tumours, and *procedentia recti;* which at times are most afflicting symptoms, as they prevent all kinds of motion or exercise. These are too often the unfortunate consequences of frequent purgatives, especially of the mercurial and aloetic kind; which

* This poor fellow, who lives 30 miles from Newcastle, lately asked me by letter, whether I thought he ought to go into a lunatic hospital, as he considered himself insane?

tend most to weaken the bowels and bring on a constant tenesmus.

It is the nature of these diseases to pervert the regular economy of both body and mind. We therefore frequently hear patients express sensations, as if they had no bowels, and all was vacuum within them. A friend of mine of an exquisite nervous temperament, a clergyman and elegant scholar, expresses this sensation, as if half of his body was joined to the other like a wasp. So sensible are they at times to arterial pulsation, that they say they have pulses all over; and count the strokes of the heart without applying the fingers to an artery.

When dyspnœa, with cough and hoarseness, is present, it is of considerable importance to distinguish how far these form a part of nervous indisposition, for phthisis, frequently supervenes without much cause of suspicion. When irregularity of the *period* accompanies these pectoral symptoms, they become still more equivocal. Even the expectorated matter only helps to create doubts. But there is a kind of cough that has not inaptly been called *nervous cough*, which consists of a short hick,

something approaching to a hoop, and not attended with much fixed pain of the breast: nor does the difficulty of breathing which accompanies the nervous cough, give the sensation of so much fulness of the chest, or oppression; but rather a feeling that the cells of the lungs refuse to admit the air. The nervous cough is also more affected by the passions than that of phthisical persons. The family predisposition will enable the physician to form a correct prognosis on most of these occasions.

I have seen some obstinate hiccups, in both sexes, in these diseases, that resisted every thing that could be thought of; nor did they intermit, for some weeks, except during sleep.

Hydrophobia has been met with in these diseases, and where the dread of swallowing liquids was little short of what has been observed in *canine madness*. I believe in all situations where deglutition is difficult, when not owing to mechanical compression, it is found more painful to swallow liquids than solids. The *hydrophobia* of Rabies, is to be considered as a nervous symptom, expressive of the inverted action of the

osophagus and muscles of the pharynx. The dread of water is therefore to be explained, from the impression which the mind receives on looking at the water, as associated with the act of swallowing it under the reversed motion of the muscular fibres which perform deglutition. It must be nearly allied to the *globus hystericus*. It is strange that anatomists should look to the pharynx and gullet, for the seat of hydrophobia; which must be imputed to the *sensorium commune*, and is not to be detected by dissection. I have however frequently known the throat so contracted, and the tongue so cumbersome in the mouth, that nothing but slops was taken down for months, under nervous indisposition.

In general, nervous persons are bad sleepers. In some cases sleep is neither felt nor wished for by the patient; whole nights being passed without it. But we have also seen a continual drowsiness and inclination to sleep, prevailing symptoms. If lying long in bed is much indulged, it is apt to terminate in a soporose disease; for sleep, like other customs, grows upon us by use, and leads to fatal consequences.

The state of the pulse in these disorders, is as variable and inconstant as all the other sensations of the patient. It is sometimes regular and equal, in conditions of great pain and suffering: and at other times, is found uncommonly quick, unequal, irregular, and intermitting; when the symptoms are very moderate. It may be presumed, from these affections being primarily seated in the nervous system, they only affect the vital functions at intervals. I have certainly known the pulse remain with little variation from health, in some fatal cases, till within a few hours of dissolution. Yet nervous persons in general, have a quick pulse; and in some instances it has been noticed at 200 in a minute.* Their senses being all uncommonly acute, a sudden noise or start quickens the pulse, and produces palpitation in an instant.

But the most formidable aspect which these diseases assume, is when they have lasted so long, as to bring on fatuity, or imbecility of mind, melancholy, and madness. Among drunkards in particular,

* Whytt.

these kinds of termination are very common; and we impute them to the disorganization of the brain itself.* For in these cases, whatever causes an increased determination of the blood to the head, increases the delirium; this is observed particularly with regard to ardent spirit and opium. But nervous people commonly die of apoplexy, palsy, atrophy, dropsy or convulsions.

Since the second edition of this work was published, I have been consulted in fifteen cases of *mental derangement;* and the whole strongly marked as being of the Nervous Temperament. From the first, I gave the relations hope of a speedy recovery, because the peculiar traits of constitution were not difficult to be found out. There were three females in the better rank of life; five gentlemen of different ages, three of them students at Oxford and Cambridge; and the remainder country people. Moral causes had some share in these aberrations of intellect, in most of the cases, and operating on the irritable mind of nervous

* See the account of the dissection of inebriates, where the cerebrum was found diseased.

subjects. One of the students was brought from Oxford, for the purpose of my advice; all the others lived at no great distance from Newcastle.

No part of my practice in nervous complaints, ever afforded me more confidence in the doctrines supported in these pages, than the recent instances of insanity which I have had occasion to treat. They, with others, enable me to contend, that *madness* is more often connected with disease in the bodily organs, than physicians have been willing to admit. But if my opinion is correct, it gives the consoling hope, that the treatment of the deranged mind, on these principles, will be more successful. Wherever insanity appears in a gouty family, it will, to a certainty, be of this cast, and may be easy of cure. I particularly give the instance of the character in an arthritic family, because it is more easily discovered there, than in other subjects. In my correspondence with nervous patients, in different parts of the kingdom, many of them speak of the desire for destroying themselves in the low and gloomy moments of their malady. Such feelings ought always to be suspected, for they generally

precede mental derangement. This is a curious fact in the history of the human mind, that in the incipient stage, self-destruction should be a prevailing idea: while the confirmed maniac almost never thinks of putting an end to his existence.

One of these patients, an only son, was attended to my house, by his keeper, his father and mother, and an uncle and aunt. The disease was of six months standing, three of which had been spent in a madhouse. He was quite outrageous, and unmanageable. The evidence obtained from the relations, clearly proved the strong nervous and stomach complaints that prevailed in the family, and still more strongly marked in the young man. He was completely recovered in three weeks; had a slight relapse soon after; and has now been more than fifteen months in perfect health of body and mind.

Among the ancients, it is very common language to speak of medicines that purge melancholy. Now if certain cases of mania, exhibit such marked disorder in the first passages, to clear the stomach and bowels, and emulge the biliary and pancre-

atic ducts, by brisk purgatives, was, no doubt, a masterly practice.

These facts demonstrate in the most convincing manner, that mental affection, and mental derangement, form a part of that vast chain, which connects certain bodily organs more than others, with our intellectual part. It may thus be held as a law in the animal economy, that even articles of *materia medica* act powerfully on the mind, through the medium of our nervous system. But I must here put an end to these reflections, least I exceed the allotted bounds to this part of my doctrine.

I have forborne to mention many of those idle stories, which some authors take delight in telling, as the effect of extravagant illusions of fancy, which nervous people are said to be subject to. I hold their whole complaints to have a real existence: and from whatever cause pain may arise, it is the province of the physician to employ his art to subdue it; not to ruffle an irritable mind by unseasonable levity, or expose a morbid sensibility to insult and reproach.

Dissections have not forwarded our knowledge of these diseases: and indeed

when we consider the nature of their symptoms, symptoms flying from one organ to another in an instant, and thought succeeding thought, with the rapidity of lightning, we are the more inclined to think that inspection of dead bodies will not improve our method of cure. It is true, that the stomach, liver, pylorus, intestines, mesentery, kidnies and bladder, and the uterine organs in females, have at times been found diseased; but such deviations from the healthy state, must in general be secondary symptoms, the effect, not the cause, of these ailments. In the transitory jaundice of dyspeptics: or in the migrating cramps, globus, or strangury of the hysteric affection, what physician would look to organic lesions for their seat? Persons are known to die of the most dreadful symptoms of these disorders, where nothing could be discovered by the knife:* which, with all other circumstances attending them, confirms the belief, that their *pathology* is to be sought for in the nervous system; which will be our next task to investigate.

* Whytt on nervous diseases.

CHAPTER VI.

The general doctrine of these diseases.

The most prominent parts of the character of these diseases are, that they occur chiefly under peculiar modes of living; are hereditary, and affect in a particular manner, the organs subservient to the preparation of nourishment.

It appears from what has been said in the preceding chapters of this work, that they are unknown in the savage state; only rarely met with among rustics; but are to be found in abundance in large towns, or wherever luxurious habits have displaced simplicity of living. They are so far to be classed among mental disorders, that a *disposition of mind*, not easily to be defined, attends every degree and stage of them; beginning with uncommon sensibility to all impressions; peevishness of temper; irresolution of conduct; sudden transitions from sadness to joy,

and the contrary; silent or loquacious; officiously busy, or extremely indolent; irrascible; false perceptions; wavering judgment; melancholy; madness: exhibiting in the whole, signs of deranged sensation.

These diseases receive a stronger tincture from the manners of the age, than any others to which the human frame is liable: and when they appear in great numbers, as in the present day, they form an epoch in the physical and moral history of society; so wide is their range, so important their influence on the state and condition of mankind. I have seldom known any of those persons denominated Quakers, to have been severely troubled with nervous complaints. This testimony is at least honourable to these people; and some proof of the good moral conduct and sobriety which prevail among them.

The *causes* which produce nervous diseases, may be divided into two *kinds*, namely those which arise from the mind; and those which arise from the body. Of the first kind, are all the disorders of the passions; of the second kind, all those causes which affect particular organs of the

body, that by their office, are intimately connected with the nervous system. Many of these causes, of both the mental and corporeal class, act for a length of time before they bring forth actual disease; but this mode of operation would seem to happen only where there was no predisposition. They may therefore be said first to create predisposition, and when this is sufficiently done, a train of symptoms appears which constitutes real disease.

To predisposition, whether hereditary or acquired, I give the name of *nervous temperament*, which is now to be considered as a permanent state of body, that cannot be easily changed, and will commonly remain for life. This temperament is to be observed in different shades and gradations, mixed with the other temperaments; but where it is exquisitely formed, it is known by the following signs: *a sensible, irritable, and mobile condition of nerves; by which different organs of the body, from slight causes, are urged into violent and involuntary action; and their motions and sympathy often reversed; giving birth to false perceptions and erroneous judgment*; *and sometimes accompanied with pain of the acutest*

kind. This temperament is said to bear all evacuations ill, especially the loss of blood; and also is easily injured by medicines of the rougher class; it is not very very liable to diseases of the inflammatory kind*, and suffers in an uncommon manner from every excess of debauch.

It is evident, from the history of these diseases, that where the nervous temperament prevails, all the causes which operate upon it, bring forth motions and sensations very different from what is found in a healthful structure of nerves, in persons who are without the predisposition. This is more exemplified in what may be called the mental causes, than in the corporeal. The moral evils of life are very much of a relative nature; their effects depend, in a great measure, on our capacity of feeling, for receiving them, or the fortitude which we are able to oppose to them. Thus, one man is condemned for sinking under adversity, as a proof of deficient virtue and spirit; while another is extolled for his courage, as a token that he possesses nobleness of mind. Yet the physical trait of

* Gregorii med. ther. conspect. vol. ii. chap. xxiii.

their temperaments will best decide with impartiality on their respective merits. The first may be a weak nerved being, and a good man; and the other, under apparent resolution of soul, may possess nothing beyond want of feeling.

But this applies even to the corporeal causes. Let the two persons start together, to drink a bottle of ardent spirit in the twenty-four hours, for life. The nervous man will, most likely, find his frame shook to pieces at the end of two weeks, or as many months; while the other will continue his potation for as many years. When the first dies, of weak nerves and tuberculous liver, at the end of three months, the other may still remain strong and hale. It may now be said that the first was a drunkard, and died *felo de se:* but the survivor will have a chance of preserving his reputation for sobriety. Of so much importance is the study of temperament in judging of the causes of these diseases.

The living body possesses the faculty, if I may so call it, of receiving impressions, and retaining them, even to the hazard of its destruction. All predispositions are of

this kind. When a person subject to gout, undergoes a long mercurial course for the cure of syphilis, he may not be always warned of the increase of predisposition, which he will infallibly acquire by this process; though he may be duly told of the necessity for mercury to subdue the other disease. And if it were left to his choice, he would still prefer the antisyphilitic regimen, and make the best he could of his gouty diathesis. If besides, he is attached to the bottle, or has contracted the habit of taking opium in large doses to ease his griping pains, he is going fast on to give the final blow to health; and the last degree of this is, the completion of predisposition, or constant gout and nervous affliction. So that *predisposition*, in its various stages, is the medium between health and disease. A gentleman subject to gout, weak nerves, and all their horrors, consulted me some time ago. He took his wine freely, and an opiate every night at bed-time. The last, he said, was to ease his spasms, and to give him rest. He was also of extremely slow bowels. I warned him of the dangerous habit he had got into; and in order to

save the remainder of his constitution, recommended him to give up his bottle and his laudanum immediately. But the conflict was too great for his fortitude; he did not call upon me a second time. This man, I dare say, was both able and willing to pay a physician, provided he could find one to his mind. That society must be undergoing the last degree of vitiation, where the faculty of medicine receives gold, and returns poison!

All those passions of the mind, which have been narrated among the causes, act immediately on the nervous system; whence a train of sympathetic affections instantly commence throughout the whole body, but especially in the chylopoetic organs. And again, those causes which induce nervous disorders through the body, affect first the digestive and assimilating powers; and are from them reflected on the nervous system; whence commences a train of inverted sympathies and false perceptions, which shew how far the mental part of us is concerned in this general tumult of sensation and motion.

Why a station so exalted in the animal economy was given to the chylopoetic

viscera, we can only account for from the pre-eminence they occupy in preparing the nourishment of the whole system. The appetite for food, the digestion if it, chylification, sanguification, and the nutriment derived therefrom, are among the most wonderful operations of nature. One of the first instincts of our existence is the desire of food. Nay, it is probably the first, and coeval with the rudiments of the fœtus. Some peculiar inherent power, not to be expressed by abstract terms, enables the vivified germ to draw nourishment from its nidus, the fluid which surrounds it. Every particle of the nutritive juices, elaborated by the maternal process, is attracted by the congenial sympathies of the embryo. These juices hold in solution what is to be the future solid, such as cellular membrane, muscle, tendon, bone, and *nerve itself.* The nervous system, or sensorium, must be the basis and the *prime director* of this creative process, till the human form in all its parts is fully evolved. The circulation of the blood, from the mother to the fœtus, now commences, and continues the supply, though not by a direct continuity of vessels. And the placenta, by

oxygenizing the fœtal blood, supplies the place of the future lungs. When the required bulk is completed, the infant, endued with peculiar instinct, urges the womb to expel it, which terminates in the birth. The nourishment, which the child received from its mother before birth, is now to be prepared in part by its own organs. I say *in part*, because milk is a substance half animalized, and nearly ready for assimilation.

We thus comprehend *three* stages in animal existence, where the manner of receiving nourishment is varied. The *first* stage is limited to that early condition of the germ, before the circulation of *red blood* can be distinguished. The *second* stage commences with the circulation of *red blood*, and terminates with the *birth*. The *third* stage begins with the *birth*, when the nourishment of the body is to be prepared by the *chylopoetic viscera*, which continues through life.

The human stomach is an organ endued by nature, with the most complex properties of any in the body; and forming a *center* of sympathy between our corporeal and mental parts, of more exquisite quali-

fications than even the brain itself. Yet the knife and eye of the anatomist do not discover the whole important station it holds in the economy: we must look to the living system for those nice connexions of cause and effect, and that source of association, which give it a relationship to so many organs, both in the healthy and diseased state. There are few diseases in which it does not participate: even slight blows upon it have proved fatal: but its wounds are to a certainty, mortal. In all those disorders whose seat is the nervous system, it particularly suffers. In fevers of every description the stomach is peculiarly affected; and till the febrile movements decline, the functions of this viscus are suspended.

An organ intended for such important purposes in the animal economy, must receive from the hand of Nature singular tokens of her favour. Hence we find all those viscera, which assist in preparing the chyle, and what is called the assimilation of the food, joined in a circle of nervous communication, of which the stomach is the centre. One portion of nerve is distributed over the whole; so that while they are all

employed in one purpose, disorder cannot take place in any of them, without the whole being thrown into confusion.

Anatomists have discovered an unusual share of nerves about the upper orifice of the stomach; from which it was thought by some philosophers to be the *seat* of the soul.

The nerves of the stomach are derived from the *par vagum*, or eighth pair, which communicates with the *great intercostal or sympathetic;* and by it, is connected with almost every other nerve of the body. The *semilunar ganglion* of the great sympathetic, supplies particularly the liver; gall bladder and ducts; duodenum; pancreas; spleen; jejunum; ileum; and part of the colon, &c.: the renal glands, kidnies, ureters, and bladder; the womb, ovaria, testes, &c. are all supplied by the same nerve; and joined by others from the lumbar vertebræ. The muscles of the pharynx, and trachea, those of the neck and lower extremities, are even connected by branches of this nerve. The lungs, heart, and diaphragm, being all furnished with nerves, which communicate with the *great sympathetic*, it would appear, that this nerve is

the grand link or chain, which *connects* the vital, animal, and natural functions with one another.

When the great sympathetic enjoys its full health, all the organs to which it is distributed will be found performing their different offices with vigour, accompanied with pleasurable sensation. When the stomach has been replenished by a full meal, after some time, sleep supervenes, which is easy and sound; and with this commences the process of digestion; the solution and expulsion of the food from the stomach; its mixture afterwards with bile, pancreatic juice, and intestinal mucus. Every pore, vessel, duct, or gland, that is engaged in this great business, contributes a share of soothing influence to the dormant animal functions; and the temperate man awakes refreshed and invigorated in body, with faculties equally clear and renovated. But the dyspeptic stomach exhibits a very different train of phenomena. After the repast, sleep scarcely closes the eye-lids of the nervous man: a croud of unpleasing ideas disturbs the mind; flatulence, acidity and borborrigmi, torment the body, digestion goes on imperfectly; and

he wakes low, languid, and unrecruited; sick at stomach, and without appetite for breakfast.

The *pathology* of these diseases is therefore to be chiefly sought in the functions of this nervous communication; and most of the symptoms to be referred to the same. Thus in a dyspeptic condition of stomach, such as attends nervous complaints, it is not the muscular fibre alone of that organ that is to be considered as diseased; but every gland and pore, exhalent or follicle, that separates either gastric juice or mucus; and consequently all the fluids are poured forth in a vitiated state. The appetite will then be irregular, sometimes suppressed, sometimes voracious; the acidity will increase so as to become painful; the food will remain undigested, and uneasiness and inflation of stomach will succeed. Other viscera will, by consent of nerves, be also deranged in their respective offices. The pancreas, its juice and duct are affected. The liver will secrete the bile in quantity and quality, both different from its healthy state; and the ducts will be irregular in conveying it forward. The peristaltic motion of the intestines

will be inverted and inconstant; and constipation or diarrhœa be the consequence. Even the kidnies, more remotely connected, will discover indisposition, by the urine being voided turbid or pale, in spare or profuse quantity; sometimes with pain in the loins, ureters, bladder, testes, or mammæ. Those uneasy sensations which rise to the throat, and there give the idea of strangulation, often attend the stomach affection. The lungs expand with difficulty, the breast labours, the heart palpitates, the eyes grow dim, a giddiness comes on, confusion of thought and insensibility commence, and the patient often falls down convulsed.* There is not a muscle or organ of the body that receives a single tendril of this *sympathetic nerve*, without partaking more or less, in these diseased feelings.

But there are not two people who feel exactly alike, in a disordered condition of stomach: and this difference depends on causes so various, that the idiosyncrasy, or peculiarity of constitution, in every individual, must be sought for before it can be

* Hysterics, and epilepsy, or falling sickness.

explained. Early habits, pursuits in life, modes of living, moral character, preceding diseases, amusements, professions, seasons, climate, &c. must all be taken into the account. Thus one person suffers by severe and obstinate head-aches; another is prone to hysteric or epileptic fits; some are afflicted with cramps and spasms of stomach; others by acidity aud flatulence. The liver and biliary ducts, with deficient secretion of bile, its increased quantity, or obstruction from spasm, mucus or gall-stones, and suffusion of the skin, are peculiar to one constitution: while bowel complaints, nephritic pains, urinary calculi, and strangury, harass another. Nervous females particularly suffer at the *period;* in all irregularities of it, from whatever cause; and in the puerperal state. Some persons sink more under dejection of spirits; while others exhibit sudden vicissitudes from high to low, and the contrary. Temporary insanity is more frequent with women than men; and it attends some of them during every pregnancy. Yet I hold all these, and many other shades of nervous indisposition, to be still one and the same disease. Nay, we frequently ob-

serve the family peculiarity to be hereditary; and often distinguished by external signs, as the child happens to be like the father or mother. The nervous power, in some persons, is precipitate in its movements, tumultuous and convulsive, and gives a hurry to all their actions. Others again appear more sluggish and deliberate, where the nervous power is more torpid; but it is at the same time liable to inconstancy when under the influence of different passions.

We know so little of the nature of the nervous power, that we can only judge of the moral causes of nervous indisposition, from their effects. Some of the passions have received the name of *exciting*, and others that of *depressing;* but their effects on the *nervous temperament*, seem much alike. The chief of the passions, such as anger, joy, grief, fear, &c. destroy appetite, disturb digestion, prevent sleep, make the breast labour, and the heart palpitate; render the mind fickle, timid, incapable of judging accurately, &c. Here is no proof that any of these passions weaken the nervous system; they only dissever that combination, or association of ideas, which

impresses the mind with pleasing objects; and which disseverment to the mind is painful, and throws all the more sensible organs of the body into immediate disorder. The mind and body being connected by the *nervous system*, the same train of symptoms appear, when those causes are applied to the body, which first affect the chylopoetic viscera; such as a mercurial course, or a debauch with ardent spirit or opium. Now, what can be the reason, that these passions, or the articles just mentioned, have such extraordinary action on nervous people, while on others they have no such effect? I would explain the fact in this manner: the hereditary temperament is supposed to inherit all the bad impressions of its progenitor, hoarded as it were in the structure of its nerves: in like manner the acquired temperament retains, or records as it may be termed, all the effects of vicious indulgence. So that when any fresh gust of passion arises, or any luxurious stimulus is applied to any portion of the sympathetic nerve, these accumulate the quantum of predisposition; and a *nervous fit*, or a *bilious attack*, is the immediate consequence of every new trou-

ble of mind, and of every recent debauch of the body. Thus the habit may become so completely nervous, or in other words, the *predisposition* may arrive at that height, that the faculties of the soul will be worn out, and fatuity take place; and the body will be so enervated as to be in a state of constant pain, tremor or convulsion. Such cases, in no small numbers, are certainly to be seen every day, by medical observers who possess discernment to appreciate experience.

The operation of ardent spirit, which includes wine and all fermented liquors, and of opium, if not all narcotics whatever, is much alike on the animal economy. They assail in the first place, the nervous system, and all other effects are secondary. The nerves of the stomach feel the first injury: but so intimately are these nerves connected with the whole that supply the chylopoetic viscera, that they are instantly drawn into consent. The stomach, intestines, pancreas, liver and ducts, become thickened, and grow torpid by long indulgence in these articles, and unequal to their functions. But it will not be doubted by any person who has attentively watched the ef-

fects of opium and ardent spirit, that all the early symptoms of indisposition which they create, are purely nervous, and extended by sympathy. I was formerly of opinion, that the enlarged liver was owing to the constringing power of the alkohol being spread from the duodenum to that viscus, through the ducts. But this explanation is not satisfactory: and opium, and other narcotics, cannot act by hardening the fibre or animal solid. *The hepatic system must be injured by nervous communication and sympathy with the stomach.* But if it is common in a severe disease, and after long continuance, for the liver of dyspeptics to be found sometimes enlarged, where no vinous stimulus had been used, such a case must have been of nervous origin, to a certainty; and from this we have a right to conclude, that the diseased liver of drunkards is almost always of this kind. When the hepatic nerves are rendered weak, mobile, or torpid, by the excessive use of alkohol, it necessarily follows that this debility is extended to the whole substance of the liver. There is no proof that an inflammatory stage and fever are always the consequence; on the contrary, I be-

lieve inflammation seldom happens. The hepatic system of inebriates does not appear injured, till a very considerable degree of debility has taken place throughout the body: there is a general derangement before this assumes any signal mark of disease; and many of the worst symptoms are often present, when nothing beyond nervous affection can be suspected. Jaundice has too frequently been deemed a sign of enlarged liver; but it so happens that the jaundice of nervous people has little connection with the liver.* The irritable, or torpid state of the duodenum and ducts, just as the nervous power happens to be deranged in them at the time, is the most common cause of biliary obstruction, and consequent jaundice. Nay the appearance of jaundice must often be a proof that the secreting office of the liver is perfect.

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During the inverted motion of the muscular fibres of the intestines, so peculiar to the nervous temperament, the opening of the duct that conveys the bile, from its singular form, must be very liable to obstruction. And this is thought to be the most common cause of icterus.

But if the torpid and enlarged liver is thus proved to arise from nervous debility, must not the cure turn upon an invigorating plan? The first step to this must be to remove the causes which brought it on; in the drunkard, let the bottle be laid aside *entirely;* let such mental and corporeal stimuli be used as have a restorative quality; and health must return, if it can be brought about by human means.

But these principles apply with still more force where biliary obstructions infest the female constitution. The irritable nervous system, and delicate bowels of most women, ought to make medical people consider well before they attempt violent remedies, to overcome obstruction. The true method of cure in weakened females, must be to strengthen the whole chylopoetic viscera, by such medicines as communicate permanent energy to the nervous system:

to obviate slow bowels or diarrhœa, to correct acidity and flatulence; to attend to the quality and quantity of the food; to regulate the passions; to observe strict rules of air and exercise; to avoid cautiously every excess in stimulation, whether mental or corporeal: in short, *to reverse all established habits, and to force a new train of actions upon the temperament.* I speak from much experience on this subject: and it is admitted by the advocates for the mercurial course, that they have no certainty of the *supposed liver affection* being removed; but their patients are at intervals returning to the medicine; and we have known some instances where ladies of the nervous temperament were *taken very unexpectedly out of their hands*, by what was called the cramp of the stomach; a symptom that sometimes follows with a quick pace, the exhibition of mercury. These gentlemen must have often met with obstruction and suppression of urine among nervous patients: yet it does not appear that they consider calomel the best relief to the kidnies and bladder. In fact, in most cases, of both jaundice and ischuria, we are to look to nervous sympathy for

their cause; for they commence and disappear in general so suddenly, that *local causes* can scarcely be suspected. We might as well dissect the top of the osophagus for the cause of *globus hystericus*, as attempt to fix the pathology of these versatile movements, in the secreting or other organs; or inspect the brain of a hypochondriac for the picture of his *blue devils*. The migratory power which these affections possess, of traversing every part of the body, is the inscrutable *idioscyncracy* of the NERVOUS TEMPERAMENT.

A physician of our acquaintance, for many years was subject to dyspepsia, and conceived that he had a *diseased liver*, as he termed it. For twenty years he took calomel in large doses very frequently; and all this time with a manifest increase of his complaint. The bowels however came to that torpid state, as to resist every common laxative; and he at last got to the enormous quantity of thirty grains of calomel for a dose. I speak from his own authority. He became weak and emaciated, and at times suffered great pain; and sunk under the debility, which was to a certainty produced by the mercurial poi-

son; for when the body was opened *no liver disease appeared!*

About eight months ago, a medical gentleman consulted me for various nervous and dyspeptic complaints. He said his liver was affected; and he had taken calomel, at intervals, by the advice of a neighbouring physician, for the last twelve years. He had a slight bilious look, and evidently possessed hereditary predisposition; was rather thin, and the bowels in a very irregular state. I recommended the usual strengthening plan, with horse exercise, and abstinence from vinous liquors, and opium, which he used freely. In a few weeks he got well, and recovered his flesh. In four months he felt some return of his indisposition, and resorted again to his calomel. But his bowels became more uneasy, and he felt a constant tenesmus. He came again to me, and he suspected when I saw him, an incipient ascites; nothing however appeared outwardly. I repeated my former cautions to him about the use of mercury, for I looked upon it as the chief cause of his sufferings. He took the advice of two eminent physicians, at some distance from his home;

and they prescribed mercury. He began the plan recommended, and died in a few weeks; in my opinion, with a constitution destroyed by this medicine.

The mistaken pathology of these diseaes, it thus appears, had given birth to this unwarrantable use of mercury. Such cases cannot be made too public, in order to caution inconsiderate people against the indiscriminate administration of a medicine so capable of doing harm: the bowels of these gentlemen were evidently reduced by it to a state of palsy.

But however afflicting the condition to which the body is often brought by nervous infirmity, the mental indisposition is the cause of greater misery. To enumerate all the degrees of deranged intellect in these diseases, would be a difficult and useless task. They comprehend all that is extravagant in delusion, or absurd in fiction. The acute, but too often false perceptions of nervous people, are an apology for some of the stories we hear of apparitions, of magic, and of witchcraft, that have at different times imposed on the credulity of mankind. Their deluded and vivid imaginations are capable of believing any thing;

and instances of supposed supernatural agency, conceived in a dream, have often made such strong impressions on the mind, as to be attended by consequences of great importance, not only to the individual, but to the community. All jugglers and mountebanks find these persons an easy prey. The impostor Mesmer, who, about twenty-three years ago, exhibited his talents in animal magnetism, by exercising nervous people at a kind of ordeal, which he had invented, found them answer all the purposes of his deceptions; and many well informed men believed firmly in the truth of his doctrines. Yet the effects which were produced, were plainly owing to sympathy, and the power of imagination; just as we observe one nervous lady fall into a hysteric by looking at another in a fit; or like the two children mentioned before.*

The temper of mind with nervous people, renders them very prone to what is called *reverie*. In the sunshine of their sensations, much of the time passes in con-

* See the report of the Examiners appointed by the King of France.

templating imaginary pleasures, or what, in common language, is called, *building castles in the air.* And when they are roused from this fool's paradise, they are very apt to fall into the other extreme, of low spirits and apprehensions. So certainly does a corresponding train of thought follow every odd feeling, in these whimsical disorders.

In the introductory part of this inquiry, we have given a cursory view of the savage state, so as to shew how favourable it is to vigor and health of body. We there observe man to pass through existence with wants so few, that he overcomes them by his individual exertions. The spot that gave him birth, bounds his travels; and his knowledge is confined to the customs of his own tribe; so that if he has little call for bodily labour, he has still less for mental acquirements. His diseases are only the infirmities and decay of nature; but of the whole catalogue of ills which infest mortal life, he is least in danger of being afflicted with those of the nervous class.

But how different is man in the civilized world! He is obliged to undergo a kind of training how to live; to instruct him in what he owes to himself, and what to so-

ciety. Where the savage feels one want, the civilized being has a thousand. Devoted either to love or ambition, these impress all his actions with extraordinary vehemence, perseverance, and enterprize. He is no sooner brought into the world, than he is taught to admire every thing that dazzles, glitters, or makes a noise. His very employment is play; and all his toys are either shining or sonorous. Flattery is the first expression addressed to dawning intelligence: he is called pretty, to make him a coxcomb; named good, till he becomes a hypocrite; and learns to act the tyrant, by seeing every person afraid to disoblige him. Every thing within his view is calculated to prompt his desires and provoke his passions; no antidote is opposed to suppress the one or to moderate the other: and he finds example every where at variance with precept. If he is born the son of a rich man, he is still more unfortunate; as he will be caressed by more sycophants, and exposed to greater temptations: and to be born a prince, is to be the most unfortunate of mankind.

The more complicated and various the pleasures and business, which man is to

pursue in life, he will be the more liable to defeat and disappointment; and the more ardent his passions, they will the sooner terminate in exhaustion and disgust. The busy scene, therefore, leads quickest to satiety: the retired circle preserves the longest enjoyment. So that thousands of human beings walk the round of gaiety and dissipation, for the certain reward of nervous debility. It is only at a particular stage of refinement, that these diseases receive their birth: and when they exceed the sum of other disorders in a nation, they afford sure tokens, that that people is passing fast into dotage, and even under apparent prosperity verging to decline. They multiply in prodigious proportion: for besides the *hereditary* predisposition, which descends to the offspring, they are daily gaining ground from *acquired* infirmities. When we thus contemplate with a philosophic eye, the rise and progress of a nation, we observe a kind of physical necessity for the regeneration of mankind. A people polished and improved to the utmost, cannot remain long stationary; it must degenerate in body and mind. It

must fall into slavery under some powerful invader; or sink by some convulsion of nature; and, with all the arts and elegancies of life, return to the barbarism of its aborigines. Such a change of condition brings man back to pastoral and agricultural habits; by which his sinews will be newly strung, and his vigor of body renovated. And with these acquisitions of corporeal reproduction, the faculties of mind in a latent state, will accumulate those powers and excellencies, that, in a future period, will exalt human nature to civilized perfection; though still to be exposed in its turn to a similar decline.

Although much stress has been laid on the imperfect state of the digestive and assimilating powers, in these diseases, yet we often find a considerable degree of obesity present, where the symptoms of indigestion prevail. But obesity is seldom a proof of strength; perhaps it oftener accompanies weakness: and the indolent, inactive life, so often led by nervous people, must favour the deposition of fat. A spare, thin habit, is however a more frequent attendant on dyspeptic constitutions. The

food may not only be badly prepared in the stomach, or vitiated by imperfect bile and pancreatic juice; the lacteals and mesenteric glands must also be diseased, sometimes impermeable, and perhaps ulcerated. The quick evolution of acidity, in some of these cases, is surprising; it is no sooner corrected by alkalies or carbonate of lime, than fresh quantities are felt. There is even reason to believe that some of the intestinal secretions are so depraved at times, as to become acid immediately, the accumulation is so rapid. The simple deficiency of bile cannot account for this, unless the bile also loses its alkaline properties, which I rather suspect it does in part.

Acidity is not always accompanied with flatulence. The last symptom is peculiar to some constitutions; and it is most troublesome where sedentary habits are carried to excess, as in some females. The uncommon quantity of air sometimes extricated in the process of digestion, would make us suspect a large proportion of the food or water to undergo chemical decomposition. Some active exercise or quick agitation of the body affords the most cer-

tain relief. The frequent micturition, and strangury, which attend nervous indigestion, prevail most when the stomach is loaded with acidity, and this points out the method of cure. I have not made any experiments on the urine in these cases; but it is likely, that the *uric acid* must appear in large proportion at that time.

All derangements of the uterine system exemplify, in the most striking manner, the strong sympathy between the chylopoetic viscera, and these organs. This is observed particularly at the age of puberty; at the *period;* at the beginning of pregnancy;*

* Many of my contemporaries at Edinburgh will recollect a case mentioned by Dr Cullen, in his lectures on the practice of physic, that strongly proves the power of association during gestation. A lady in a hopeful way, found it necessary to have her robe made easier, and sent for her mantua-maker. But in standing up to be measured, she grew so sick, that it was accomplished with great difficulty. The gown was brought home; and in attempting to try it on, the lady became so squeamish, that the mantua-maker was obliged to desist, and leave her work to another time. A few days afterwards, another attempt was made to try it on; but now the very sight of the gown brought on sickness. It was determined to take the gown away, and to hang it up in a dark closet, not to be

in the puerperal state; in suckling the infant too long; at the change of life; in all conditions that affect the passions; and, more or less, in every complaint to which the female may be exposed. It must, therefore, be of great importance in practice, that the physician should inform himself well, with respect to predisposition and temperament. We thus see on what irrational grounds the use of a class of medicines called *emenagogues*, was founded; and how necessary it must be in uterine obtructions, to attend to the influence of that chain of sympathies on which they chiefly depend.*

How far the class of nervous diseases is connected with gout, may, perhaps, re-

seen. Even this precaution did not avail; the lady could not look at the closet, or pass near it, without feeling immediate sickness. It was therefore carried out of the house: and this extraordinary association remained till the lady got her bed.

* I have seen many cases of young women where insanity supervened *obstructed menses.* In some it followed religious reverie and enthusiasm: in others it was connected with gloomy ideas of the Deity; but the most common cause, was the tender passion. The mental affection and the suppression usually subside about the same time, though not always.

quire much future experience to determine. But as far as the inflammatory symptoms are not concerned, the two affections appear to be the same. They both depend on hereditary or acquired predisposition: the causes which produce them are entirely alike: these are chiefly luxurious habits, and the debilitating pleasures: all the dyspeptic ailments of the nervous frame appear in the arthritic constitution. Every derangement of the biliary secretions partakes, in each, of a similar disposition; the state of the intestinal canal is subject to the like capricious vicissitudes in both; and also the urinary organs. The irritable feelings, and hallucinations of mind, with which both subjects are affected, have an exact resemblance. And we observe, that the prevention and treatment of nervous indisposition and gout, are to be conducted on the same principles.

No fact in medicine appears more clear, than that the female of every gouty family, inherits, in a high degree, the nervous temperament; and is liable, from the general causes mentioned before, to suffer all the infirmities to which that temperament paves the way. This is exemplified by the ex-

hibition of mercury and antimony; in the use of narcotics, particularly tea, opium, and vinous spirit; in every improper indulgence in food or drink, and in the government of the passions.

Gouty constitutions are known to be particularly liable to urinary calculi. The *uric acid*, which has been found to form so large a portion of these concretions, is, most likely, evolved during the depraved digestion and assimilation of the nourishment; and afterwards separated by the kidnies, and lodged there, or in the bladder. It would be worth while to make experiments on the morbid acidity of a dyspeptic stomach; for there is great reason to think that it does not differ essentially from the uric acid. All the alkalies are given with advantage in these kinds of urinary calculi; and it is fair to allow their chief effect to be in correcting the acid in the first passages.*

From what has been said, I shall hope to be justified in not attempting to divide these diseases into genera and species, which have little foundation in nature, and

* See the French chemists on this subject.

are of no utility in a practical view. Combined in the definition of NERVOUS TEMPERAMENT, they bear a near analogy and connection to one another. We thus observe, the person who in youth possesses a mobile condition of nervous system, with a temper of mind depending on that, making him fickle, volatile, passionate, will in the advance of life, be less irritable; but will still preserve so many traits of original character of habit, as still to justify the term. The dyspeptic infirmities will also undergo modification, in proportion to the manner of living and moral habits. Hence melancholy and hypochondriacism seldom appear before the meridian, but more commonly not till later in life.

On the whole then, it is fair to conclude, that the *pathology* of these diseases is to be sought in the *deranged sensations, and inverted sympathies* of the GREAT SYMPATHETIC NERVE; and in the *irregular action* of all those organs to which it is distributed. The causes, therefore, whether *moral or physical*, exert their influence on this portion of the nervous system; whose office directs the most important operations in the animal economy, and binds together in

one great circle of feeling, actions and motions both distant and opposite. Hence a concourse of symptoms of the most extraordinary kind, that invert the usual functions of so many viscera; suspend their powers, or give to them new movements: by which means a train of false perceptions occupies the mind; and ideas the most monstrous and incongruous, supplant, for a while, all rational thought. In this reciprocal action between body and mind, in whatever part of the circle disease commences, it is quickly communicated to all the others. For as bowel complaints speedily affect the mind and depress the spirits; so all violent emotions, in their turn, induce affections of the chylopoetic viscera, and raise such commotion throughout the sensitive system, as to bestow the nervous character on these diseases.

CHAPTER VII.

Prevention and treatment.

In giving a title to this chapter, I have been cautious in holding out too much confidence in medicine. The word *cure*, implies a certain and perfect recovery, without danger of the disease returning, a circumstance very doubtful here. But, according to what is meant by *treatment*, I only lay down rules to regulate the practice, so far as experience has approved. This has been the conduct usually observed with my own patients: and as so much depends on their own discretion, it puts them on their guard, and reminds them how far they are to calculate on permanent health.

It has been unfortunate for the medical profession, as well as patients themselves, that persons labouring under nervous disorders, have too much expected from the prescription of the physician, and the shop

of the apothecary, what is only to be obtained from their own caution and circumspection. We thus find most of them ready and greedy to swallow every medicine that is recommended; but stubborn and untractable in all that relates to breaking in upon established habits and customs; whether of luxurious living, depraved appetites, indolence of body or mind, or vicious indulgence of any kind, inconsistent with health. Many of these habits, it is true, are so far interwoven with the constitution, as to make some changes almost impracticable: but as indisposition is so frequently brought on, or aggravated, by the improper conduct of the patients themselves, the physician cannot be too much on his guard, in demonstrating to them all that belongs to their own government and demeanor. The medical adviser, therefore, who observes the most disinterestedness towards his friends, will often be the first man to be dismissed; while the selfish dissembler, however ignorant, will become a favourite, and engross the emolument. On such an occasion, the virtuous mind of a liberal physician will know where to look for approbation.

This branch of medical practice has commonly been reckoned one of the most lucrative; for the subjects of it are generally found among the affluent: they are also seldom without some complaint that requires assistance; and they measure their comforts too often, by the quantity of medicine that is served up. Nervous people are, moreover, endued with acute feelings; liable to act from the first impression and impulse, and easily deceived by the designing and interested. And should they fall into the hands of a gossiping physician, or a wheedling apothecary, these personages become a kind of appendage to their establishment, if not fixtures in their houses. Being singular in the selection of friends, they seldom mix in company; sedentary from habit, they go little abroad; their amusements and recreations are thus limited, and such as possess the talent of bringing news, and telling a story, are at all times welcome guests. But as the tale of their own complaints engrosses so much of their conversation, a medical gossip, before all others, is the most acceptable. Nevertheless, let the nervous and

valetudinary beware how they trust their health and their purse in such hands.

The *prevention* of all diseases depends on a knowledge of their remote causes.

If, in the former part of this inquiry, it has been found necessary to contrast the health of the savage state with that of the civilized condition of mankind, for the purpose of tracing causes from their origin, it does not follow, in prescribing regulations to the nervous and infirm, that we are to imitate the robust exercises of the barbarian, for the sake of strengthening the body, or to yield up the refinements of education and polished society, in order to subdue sensibility of mind. The lesson is only so far in point, as it tends to confirm general truths by an appeal to facts, or to illustrate a precept by showing an example.

In the present diseases, according to the history given, we admit a *predisposition* of body, without which, it is probable, they never appear. This *predisposition* may be either *hereditary* or *acquired*; to both we give the name of *nervous temperament.* What therefore relates to correcting and preventing predisposition, must begin with the earliest stages of infancy, and includes

the whole rules of nursing and rearing children.

Man is so much the creature of habit and imitation, particularly with what belongs to his *food*, *air*, *exercise*, *and cloathing*, that he may be moulded into any form we please. Nature has wisely provided milk for the infant, as best adapted to the delicate digestive organs and weak frame of early existence. This kind of food ought to be continued as long as it is capable of giving due support to the body. The mother, if possible, ought to suckle the child till it is nine months old; when cow's milk may be substituted. And it is worthy of remark, that the fodder of the cow very much affects the milk, such as *grains and turnips*, so much in use near great towns. The first article makes the milk disposed to acescency; and the turnips impregnate it with a disagreeable flavour, which comes from an oil in the tops and rind. Such qualities are hurtful to the stomachs of infants: and grass and hay are the natural food of this useful animal.

A child that is to be brought up by the *pan and spoon*, as it is called, it is obvious, ought to have the milk in the best perfec-

tion. This is a practice which I am sorry to observe is sometimes too lightly given into, in families. I have weighed its merits fully, in rearing my only child in this way, to fulfil the last wishes of an affectionate mother. But, though my darling boy has surmounted his loss with the best possible health, I would not recommend this mode of nursing, on any terms, if it can be avoided. Nothing can compensate to the infant for the want of the breast. About the third month, a little pounded biscuit, previously softened with a little boiling water, may be added, to give the milk consistence: and from the beginning, as much brown sugar may be mixed, as to give it the sweetness of mother's milk. Sugar, it ought to be remembered, is a bad ingredient in the diet of infants.

The infant may be confined to milk for the first year; when a mess of chicken, veal, or mutton broth, may be given once a day, taking care to add nothing of the aromatic kind. However, if the infant is much harassed with acidity, animal broths, such as gravy soups, are not only the best substitutes, but the best medicine. After two years, the diet may be extended to a

little solid animal food, some kinds of fish, and eggs, but still with a large proportion of milk. All pastry must be carefully shunned: sweatmeats of every sort are hurtful: every *made dish*, into which seasonings and sauces are put, ought to be avoided, as being a chief cause of stomach affections. All beers, ales, wines, and spirits, are excluded from this anti-dyspeptic regimen. Puddings made of rice, or light bread, may be allowed; but those of unfermented flour, have all the disadvantages of pastry. Cheese is gross food for children: and butter should be sparingly used. Vegetables may be eaten with animal food; the child being allowed sufficient exercise out of doors, will always find them easy of digestion. The object to be kept in view, in recommending for infancy and childhood, a diet sufficiently nourishing and easy of digestion, but at the same time, mild and bland, is, that the appetite may become accustomed to no high-seasoned or luscious dishes; or the stomach inured to any hot or stimulating article.

Were these rules strictly attended to in families subject to gout and nervous diseases, many scenes of misery and affliction

might be prevented. It is a fact, to be daily observed, that the offsprings of these families, are, of all mankind, the most liable to fall into habitual drunkenness, and the love of luxurious feasting. Their feelings and sensations are of that acute kind, that they easily receive the impression of stimulating articles, and are quickly susceptible of the pleasure of taking them down.

Tea and coffee are excluded from this diet, as possessing a narcotic quality: milk is the best breakfast; but those who may incline for more variety, may use cocoa. Cocoa is a mild, wholesome, nutritive food, and after a little perseverance, very grateful to most people, and easy of digestion.

From what has been just delivered on the diet most proper for infants and children, grown-up persons will see reasons why they should prefer a similar conduct in the choice of their food. This is indeed a serious evil with most nervous and bilious people: they commonly indulge in high seasoned dishes, and use great quantities of hot sauces or peppers, for the purpose, it is thought, of overcoming the flatulent propensity of their stomachs. I have before condemned this custom: where

flatulence prevails, the stomach should select plain fare, and that in small quantity; and after a short rest take some active exercise, which will afford certain relief.

The value of *air and exercise* to health, is amply pointed out in the preceding parts of this work: attention to them ought to begin with early infancy. The child that is ever to attain due strength or stability of frame, must be exercised in the open air. The most spacious and well ventilated room cannot supply the want of the external atmosphere. A degree of vigor and fortitude of mind is insensibly acquired by being exposed to the weather; while listlessness and depression of spirits as constantly follow confinement within doors. Much of this mental exhiliration must be derived from the objects which refresh the eyes. The sedentary life falls more to the lot of the girl than the boy, and is too often encouraged by those preposterous modes of education to which young females are exposed; but certainly a sedentary life may be considered as the chief cause of female ill-health. I have heard a mother boast of her daughter being attended by *five* masters, in different branches of education, in

the day, besides her task in the boarding school. What human body or mind, at the age of fifteen, is equal to such a trammel of study? Let the discerning mother, therefore, reflect in time, on the magnitude of the fault, if she bestow her daughter with a sickly constitution as a dower, on her husband. Can any evil in this world be worse than constant bad health? How melancholy is the state of a family that is daily beset by an attending physician and apothecary; continually served with medicine; and a large proportion of income annually consumed in support of its physical retinue!

Among children descended of nervous and bilious parents, it is a caution worthy of every well informed physician, to be guarded in the use of emetics, purgatives, opiates, and worm medicines. The last articles require particular animadversion. The fathers and mothers of such families, have too often been in the habit of using medical prescriptions on every slight occasion; and very naturally think a similar practice necessary for the health of their children. *Worms* can only be considered as the consequence of a weak condition of

bowels; so that their prevention and cure in children, must turn on strengthening the the viscera, and expelling the vermin. A brisk purgative is commonly employed for dislodging worms, and calomel has been the chief ingredient. But calomel ought never to be given alone; it is best to join it with jalap or rhubarb; though these articles by themselves are sufficiently powerful. I usually give mag. ust. with the jalap or rhubarb, with a view to the dyspeptic state of stomach; and follow this purge with gentle doses of bark, colomba, or any other suitable bitter. Nothing answers better than the sem. santon. or common wormseed. With all these I combine magnes. ust. or cret. prepar, as the bowels happen to be slow or quick. Some chalybeate, such as the red oxide, carbonas ferri, or lematura, may also be advantageously added. When these have been taken for eight or ten days, the brisk purge may be repeated. This plan may be continued for two or three weeks at a time: it will invigorate the digestive powers, and the general habit: and while it enables the bowels to expel the worms, it will prevent their generation, by removing the cause. No-

thing can be more cruel than forcing the bowels of children by drastic purgatives, to evacuate worms: the most active will sometimes fail in doing this; whereas the invigorating method is sure and safe, and cures radically.

What other precautions are necessary for the health of children, will appear sufficiently plain from what has been said on the causes of these diseases. These causes must be avoided, to insure success. The inhabitants of towns ought if possible, to place their children in the country for the benefit of education. It is not merely the pure air, and space for recreation and exercise, that a country situation affords, which make it preferable; other considerations of equal weight, are to be taken into the account. The habits which we are now combating, are the vices of artificial life. And the love of nature is one of the best lessons to a young scholar; it checks every excess, and prescribes nothing unwholesome to either body or mind. To see the grass spring, the plant shoot, and the flower blossom, are among the finest objects for contemplation. What ingenuous youth ever heard the bird sing,

the lamb bleat, or the heifer low, but warmed with emotions of a superior kind? The beauties of landscape, more than any thing we view, purify the heart, refine the taste, and warm the feelings. All is chearful, active, and healthful, because all is natural and innocent. Youth is the season of life, to learn with advantage the value of nature's productions, and picturesque scenery. If neglected then, the soil will groan under less amiable productions. To what an unfortunate change the present fashions are conforming mankind! The country houses of our nobility and gentry are empty till July. Thus the spring months, that season of joy throughout creation, passes unobserved by the affluent and gay. The souls of human beings, in this age of art, would seem to wish the sun to be darkened; they find no pleasure but in the light of a lamp or a flambeau. I feel for the rising generation, when I consider the effects of these overgrown follies upon unexperienced minds.

With respect to the *prevention* of these diseases in grown-up people, or what is the same thing, correcting the *predisposition*, no task in medicine has more difficulties to

surmount. It is not that it is impracticable; but the patients themselves are seldom willing to submit to a code of rules for the direction of their health, and view with jealousy and pain every precept that is to subtract from their pleasures. What reward can encourage the slothful to activity? Who can teach the voracious glutton moderation in eating? Or what eloquence can persuade the habitual inebriate to forsake his bottle? Nay how difficult the task, to draw the nervous female from her tea!

Where the *predisposition* is not hereditary, some of the causes which have been assigned, will generally be found to have brought it on. If these causes have been owing to any indiscretion of the patients themselves, to counteract them will be difficult in proportion to their inveteracy; and the desires and passions which give them effect. A habit is to break up, without which there are no hopes of relief. Every nervous person has some favourite pleasure to indulge. Articles of *materia medica* avail little, unless the patient forms the resolution to obey the injunctions of his physician. To begin new modes of

living; to go to bed soon and rise early; to drink water instead of wine; to labour and toil, and be exposed to the weather, after years spent in luxury and sloth, are changes not likely to be heard with satisfaction, far less to be practised with perseverance, by an enervated voluptuary. Yet changes equally great must be effected, or there can be no recovery.

The treatment of these diseases is a part of the physician's duty, that differs much from the experience necessary to direct with success, the practice in most other distempers. For, however well he may be informed by preparatory studies, and however stored with the resources of his profession, something will still be wanting to insure a decisive method of cure, which even the sick-bed cannot supply. This is the knowledge of character and of mankind, which can only be learned by quick discrimination, and correct observations formed in the busy world. The living man, seen in his varied pursuits, can alone bestow that knowledge on the physician. For this very reason, there are no disorders that so puzzle and confound the young and inexperienced; and none so liable to be

misunderstood by the ignorant, or plodding part of the profession.

The old maxim *contraria contrariis medenter*, is better exemplified here, than in most other diseases. To change a state of body induced by long customs of living, or derived from nature itself, must be entered upon with fortitude and resolution. But even where no improper habits have been formed, changes and variations of regimen, that powerfully impress the nervous system, and call forth active passions of a different kind, will often be necessary to health. To the inhabitant of a town, a country life will offer many new objects to the senses, and afford the most salutary recreations. But that this change of scene should operate with due force on the sentient part, it is not that a few weeks or months should be passed in a new situation; if it can possibly be done, it ought to be for years; nay, in some instances it must be continued for life. And when such transitions of living are entered upon, whoever intends to practise them, must duly weigh the circumstances. The mind must not be left in a state of inaction, lest it should relapse into its old feelings, and be-

come the prey of former passions. In making this transition from the city to the village, every person must be satisfied first, that he can employ his retirement without *ennui*, and pass his time to advantage. The business of a farm is the natural avocation of a country life. Agriculture in the present day is improved to the form of a science, and requires a regular course of study from the books which contain it; and when combined with the practical part, it becomes a source of profitable and elegant pursuit. Every season brings with it something to be done; so that a mind disposed to be active, cannot want a motive: and the sports of hunting, fowling, and fishing, will amply vary the hours which are devoted to relaxation.

The small circle of domestic duties, which many persons have to go through, exhibits such a sameness, that no recreation can be derived from it; there is so little of variety, that the mind as well as the body, dwindles into a tenor of listless inactivity. Sufficient stimulus is wanting to rouse the languid faculties: and in such situations we meet with the most confirmed habits of nervous affection. I

once knew a lady, who for twenty years was never out of her room: at length, without any known cause, she ventured abroad, and returned to the full exercise of all her former duties of friendship and family affairs. Such cases are chiefly to be seen among people enjoying easy fortunes, who had been formerly active, but are now without any of those urgent motives which preserve energy of mind, so conducive to health. The public funds of this country are one great cause of those torpid habits of living; where the security of property is so compleat, that any care about its safety is needless. A vast capital is by this means unproductive of any thing to the public, but is a source of bad health to its owner. All enterprize is thus checked among a large part of the community, who become victims to diseased feelings, and to those kindred glooms which prey on still life. I have known some benevolent ladies of fortune, who, having no busy employment to fill up their time, took under their protection several large families of children, among their poor neighbours; and by administering to their wants, directing their education, and dispensing

cordials, medicines, and necessaries to the sick, made themselves a blessing to society: and by the air, exercise, and recreation, which were required for the discharge of these good offices, they warded off all the unpleasant attacks of a delicate frame, and a nervous constitution.

To the man of business and the artisan, who are necessarily confined to a town, I would reccommend, that as much time as possible, in their leisure hours, should be spent out of doors, in riding or rambling about the outskirts of their residence. This kind of exercise ought to be carried to a much greater length than has usually been advised; it ought to be continued to the breaking out of a free sweat. These persons must learn to brave the weather, and sally out in pursuit of their health and recreation, in despite of wind and rain: and their dress may at a cheap rate, be accommodated to the state of the atmosphere and season. The distance from town, which may be necessary for these excursions, must be measured by the purity of the air, and the rusticity of the country: they must get beyond the effluvium of of smoke and mud.

When employed at the desk, men of business, and indeed all persons who write or read much, ought to use a standing posture, to prevent the body from being bent, by which means the lungs and stomach, as well as the whole abdominal viscera, will be free from compression. Want of exercise at all times impedes the free circulation of the blood, and the regular functions of the different bowels; but compression of these organs, whether by tight lacing and swaddling, or by any unnatural posture long continued, has still more pernicious effects. A sitting posture is also extremely hurtful to the urinary passages, and favors the deposition of matter that brings on the disease called the stone.

Exercise and recreation, of the kinds just mentioned, unfortunately cannot be employed by the town-bred female. Indeed the fashion of a town life, at this day, almost excludes the lady from every share of healthful exercise; for it is not to be expected, that the fair sex can, by themselves, frequent the public walks, or perambulate the adjoining fields, to breathe a purer atmosphere. In this age of manufacture, trade and politics, the morning

hours of the gentleman are commonly spent at the counting-house, the exchange, or the coffee-house; so that the ladies must be satisfied with a short visit of their male companions at the dinner table, which seems almost the only scene of intercourse between the sexes. In what manner then is the city lady to preserve health, or regain it when lost? If she cannot look to a country residence, her situation must be pitiable.

As these diseases, from innate delicacy of frame, fall mostly on the fair sex, how cautious ought parents to be in selecting proper seminaries of education for their daughters. Many fathers and mothers, I believe, still prefer *boarding school* tuition, to private instruction under their own eye. But I am here to speak chiefly, as it concerns the health of young ladies. Girls are commonly sent to these houses, at a period of life when the constitution is to undergo some material changes, which require the most attentive and delicate treatment. Now it so happens, that many of

these boarding houses lodge thirty, forty, fifty, nay an hundred young ladies. I am at a loss to conceive how any mistress of a school can do justice to so large a seminary of pupils. But I may be told, assistants are kept in proportion to the number of scholars. This is evading the question, not answering it: assistant teachers may answer all the purposes of school hours; but do all these assistants possess the qualifications necessary for forming young minds to be amiable wives, affectionate mothers, and accomplished women? Scarcely. A mistress of education is in the place of a parent: is this maternal duty then of so small importance that it admits of being deputed to the third degree? They must have cold hearts who think so. Every discerning mother knows well, that the smaller her family is, she can the better attend to the wants of her children. How then can a mistress of a boarding house, who officiates for a livelihood only, do more than the natural guardian? The mere acquirements of learning are a small part of female education; it is the domestic virtues, and the retiring graces, which form the chief excellencies of woman. Which

of these fashionable schools have given proofs to the world, that these are the studies they inculcated; and that their matrons are models for imitation, beyond the generality of mothers?

In this country, it is little more than a century, that daughters have been thought worthy of an improved education. So lately have we emerged from barbarism. Ever blessed be the memory of the amiable Mr Addison for this polish to society! It has not therefore yet crept into our customs, to honour female instruction with those marks of authority which distinguish public schools for boys. Preceptors bearing academic degrees, and licensed by the learned, are alone trusted to conduct the education of young men. Whereas, any lady of tolerable mediocrity in talents and accomplishments, who can meet with the countenance and support of a few well-meaning friends in her neighbourhood, is deemed equal to direct a boarding school for young girls. Books may be multiplied without number on female manners, if some check cannot be given to the custom of allowing their education to be conducted by improper persons. One vicious se-

minary will do more harm than can be compensated by all the philosophers of the age. Hence the necessity of qualifying the mother to instruct her own children.

In a public boarding school there is a very heterogeneous concourse of characters. We there behold the daughters of persons of all ranks in life; of families of the most discordant habits and sentiments; many of these bringing abroad all the prejudices of kindred; and perhaps not a few labouring under hereditary diseases, or imbecility of mind: all lodged, boarded and trained, under one roof. If imitation is one of the strongest propensities of our nature, is there not great hazard in such a collection of young people? Every good mother is cautious whom her daughters chuse as companions at home; and can she be less jealous of their safety when abroad? The best and worst of our habits receive a tincture of our associates, but particularly during youth. Such a school of young girls, all differing in rank, in fortune, in temper, in constitution, in passions, and in prospects in life, but liable to communicate follies, propensities and diseases, to one

another, must be considered as an improper assemblage.

All boarding schools ought to be situated in the country; not only for the sake of air and exercise, but that the young ladies may be cut off from gossiping visitors. This will tend to secure health, by rendering the introduction of contagious diseases more difficult. Such a space of ground ought to be laid open as may be sufficient for amusement and play; and certain portions of the day allotted for walking, or more active sports, that those who are most sedentary may be forced to partake. An adjoining flower garden will be a motive for recreation to some, while the taste may be improved by the study of Botany; a task peculiarly adapted to young ladies. Such avocations will train the female mind to the love of simplicity, and store it with that species of information, which affords food for reflection at a future day; and will fill up much of the leisure to be met with in the domestic scene.* The pupil of elegant Nature will

* The young ladies in boarding schools, in this vicinity, who are instructed to the love of the *animated*

thus find a country walk as much the habit of life as her hours of sleep; and will not be scared from it by a dirty road, or a lowering sky: a portion of time will always be due to exercise, that the faculties may be refreshed, and the eye feasted by the beauties of creation. And while her nervous aunts are moping their evenings over the card table, she will gather health by her chearful excursions; and preserve her bloom of countenance by the only means that can give it an additional charm.—These ideas may, by some, be deemed a little romantic; but when I look to the sickly frame and miserable existence of a nervous patient, I can find an antidote against this species of criticism.

The diet of these schools, I am much afraid, is often exceptionable.* And if their matrons are not too wise for advice, they will find many cautions necessary

world, have now a rich field for contemplation in the elegant volumes of our townsman, Mr Bewick. A work that does credit, not only to this country, but to the age.

* I have met with many very serious stomach complaints among ladies, who dated their origin to the diet of a boarding school.

with girls, nervous in themselves, and descended from nervous, bilious, and gouty parents. They will therefore find it of consequence to pay some attention to the physical traits of their pupils, that they may learn how to preserve health. Let them beware of encouraging hot, or highly seasoned dishes. Tea and coffee ought to be excluded from their bill of fare. Plain dressed meat; plain puddings; no pastry; no cake or sweetmeats; water, or milk and water, with meals; fish with plain butter; no vinous liquors, but when prescribed medically. A plentiful dairy will be a most valuable appendage to every boarding school: but above all, let them inculcate and be the examples of early hours in rising and going to bed.

I am one of those who consider the office of superintending a female boarding school, as a station of great importance and responsibility: and officious friends should not be too precipitate in recommending persons to fill it. It appears to me of even greater moment than a teacher of boys, let their rank and consequence be what they may. The boys whose education may have been neglected, by future

attention may be recovered: but the young lady whose manners have once received a wrong bias, is seldom restored to a simple and unaffected demeanor; and so it is with health also. To married women only this business should be assigned; and it ought to be given in preference, to one who has educated her own daughters. It will not be contended in opposition to this opinion, that any one can be sensible of the mother's duties, who has not stood in that relation herself. A good temper and benevolent dispositions must be essential ingredients in this character. These animadversions on female education and management cannot be called foreign to a treatise on nervous diseases. They are the result of long observation, and of much conversation on the subject, in different parts of the world, with many sensible women, who had received a boarding school instruction, and often lamented the imperfections to be found there.

Dr Beddoes, in his Hygeia, has lately published some remarks on these institutions, and given accounts truly frightful of their internal economy. The medical attendants of these seminaries have hither-

to preserved a silence, not always commendable, when improvements for the sake of health appeared so necessary. It is fortunate for the progress of science, and the good of human kind, that such men as Dr Beddoes now and then rise up on the theatre of the world; who, above the low trammels that fetter selfish beings, dare to combat prejudice and error, and expose the stupidity of rejecting improvement. But the first step to a wholesome reform in behalf of this most amiable part of creation, must be to limit the number of pupils. Parents have it in their power to effect this, by sending their daughters to those schools only, whose numbers never exceed a family circle.

When we recommend *air* and *exercise* to our patients, the nature of what advantage we expect from them ought to be explained, that the due effect may be obtained. A number of people are too apt to think, that a short formal walk out of doors, at stated hours, is sufficient for this purpose. Nay, there are hundreds who think they have done great things if they go abroad for an hour or two in a close carriage. Such persons may be very much

pleased with medical admonitions; but they pay a poor compliment to their physician, when they limit his directions to such forms. In a luxurious age, and in a country like England, wallowing in wealth, and rioting in indulgence, I am well aware how difficult and unthankful the task, to tell people they are doing wrong, when they receive so much pleasure; and how hopeless the prospect of bringing them back to simplicity of manners, and sober modes of living, after unbounded gratification. I must however contend, in the prevention of these diseases as depending on predisposition, that the exercise ought to be of the most active kind, even to labour and fatigue; and always till it produces a moist skin, if not a profuse sweat. As these resolutions gain ground in the *nervous temperament*, the idle and trifling objections commonly made against season and weather, will soon vanish. It is the certain effect of recreation out of doors, to exhilirate the mind, while it invigorates the body; which soon gives birth to new feelings, new ideas, and active faculties. To a person accustomed to a warm close room, and seldom moving beyond the

threshold, I conceive the influence of the external air, and sufficient gesticulation at the same time, to be a considerable step towards a *reversed method of living*.

The value of *exercise on horseback*, is so well known, that it may seem superfluous to mention it here. But in the prevention and treatment of nervous and bilious diseases, it is supereminent. When it is begun with confidence, care should be taken that the ride may not grow irksome by being constantly over the same road. A journey should therefore be frequently interposed; and some business to be transacted, kept in view. The motion and action which are communicated by riding, to the organs of digestion and respiration, are of the most salutary kind. The stomach, by being duly compressed by the abdominal muscles, has its contents, after being fully dissolved by the gastric liquor, expelled at the proper time. Some persons will tell you, that it is hurtful to use exercise after a full repast: but that is the language of a pampered being, and of one who eats beyond what nature requires: how otherwise could the labourer rise to his work, with so short a rest after his dinner? But

custom has made it familiar to him, and he is satisfied with what will support him. Were every lover of good eating compelled to walk a few miles immediately after dinner, he would soon learn moderation. By riding, the liver, with its sluggish circulation, its gall-bladder and ducts, is well pressed and agitated; so that the bile is secreted in proportion to the wants of the digestive process, and all its canals kept pervious. The peristaltic motion of the intestines is thus promoted with all the fluids; and the lacteals in like manner perform their office. The kidnies at the same time, as well as the bladder, discharge the urine to the last drop; and no particle of sabulous matter is detained in either cavity, to become the nucleus of a future stone, as so often follows a life of indolence and sloth. The lungs being fully stretched and expanded, by the full inspiration of a pure atmosphere, the vivifying oxygen is taken in, in due quantity, to afford strength and stimulus to the body, and activity to the intellectual faculties. Hence the heart is excited by the florid dense blood to strong contractions; and the surface and extremities warmed and soft-

ened by a generous vital fluid; which, while it defends from a cold and fickle atmosphere, keeps up a glowing perspiration, to the certain relief of every dyspeptic symptom. From these effects of equitation arise chearful spirits, acute understanding, good appetite, perfect digestion, sound and refreshing sleep, and all the healthful and pleasurable sensations which flow from *mens sana in corpore sano*.

The *cold-bath* is a common remedy with weakly people; and it is often resorted to by the nervous invalid. I rather wish to consider it as an athletic exercise than a medicine, I therefore introduce it under the prevention. Modern physicians have, however, made greedy attempts to bring it under their control, and to point out how and when it ought to be used. But the rules which have been laid down for the practice, and the explanations which have been given of its mode of action, are alike unsatisfactory. In the recent publication of Dr Buchan, on cold and warm bathing, the subject is treated more scientifically; and his book ought to be carefully read by every person who resorts to a watering place.

When we look at the subjects who flock to the sea-side to use the *cold bath*, we find persons of every description, labouring under all the varieties of disease. It must therefore be either a universal remedy, or no remedy at all. Hence one speaks of it as a *bracer*, and giving *tone* to the solids. Another accounts for the good effects of it, from the *shock* it gives: and a third explains it, by *accumulating* sensorial power, or excitability. Leaving all these gentlemen in full possession of their theories, I must beg to consider it chiefly as an exercise and amusement. A degree of resolution is required for the employment of cold bathing, which inspires courage; for the time, it shifts the train of thought, and calls forth a considerable muscular exertion. On the sudden immersion of the body into the cold water, a quantity of heat is instantly given out, which gives what is called the *shock;* and the temperature of the body is for the time reduced, at least so long as it remains in the water. In order therefore to render it a salutary exercise, the water must be of a temperature suited to the vigor of body, or its habit of bearing cold. We thus suppose that

the season for cold bathing is limited to the summer months; for in winter the degree of cold which we require, can be obtained from the atmosphere. In the act of dressing and undressing, the body is exposed naked to the air; I fancy this may be the means of hardening it a little to the weather, which is a good effect.

Persons who are timid at first, if their fears decline as they go on, gain advantage from bathing. But those who never surmount the dread, cannot expect benefit from it. Much of the good, it would appear, arises from the vigor and activity it calls forth. If the bather can swim, and use considerable exercise in the water, he may remain in it a length of time; but others cannot do this without danger of catarrh. After coming out, if the spirits are raised, the body agile, with a glowing warmth speedily succeeding on the skin, and fitness for muscular motion, with increase of appetite, the bath has done good. When a person is extremely apprehensive, he ought to begin bathing very gradually; lave the body first gently, then try deeper water, till at last he can bear a plunge. To remain long chilly, low spirited, and with-

out appetite, are signs that the bath is hurtful. It must be cautiously tried by patients much reduced; and is most safe after convalescence, when the usual health returns.

I am also of opinion, that those visits to watering places are highly beneficial to nervous people, by breaking in upon established habits, that uniform tenor of life which they commonly lead; shaking off indolent customs, and forcing them into company and chearful society. They *are put out of their way*, as the vulgar expression is; and this very change of discipline is a great step to a cure: the more the etiquette, therefore, to be gone through, so much the better.

In this age of refinement, while so many indulgencies creep in upon our domestic arrangements, it is surprising that baths do not become appendages to our houses. They are never thought of till the physician orders them for the recovery of health. Yet there appears nothing more likely to conduce to the comfort of a family than a suite of baths; to which all the members of it might daily repair.

Moderate exercise ought to be continu-

ed for some time after coming out of the bath, so as to promote the glow, and encourage perspiration: and the best time for using it is between breakfast and dinner. Very weakly people may begin with 72° of Fahrenheit; and reduce it as they find occasion, but it never should be brought below 54° of that scale. The employment of the bath was a common ceremony with the ancient Romans; and though frequently spoken of by Celsus, it does not appear to have been much of a medical regimen: but the cleanliness and purification of body, which flow from it as an ablution, must be allowed to be a grand defence to health.

The *warm bath* is another remedy in nervous and dyspeptic cases. In that kind of debility which is marked by a languid circulation of the blood, and a dry surface; less mobility of nervous system, or rather torpor of it; less prone to violent emotion, and subject to coldness of the extremities, and general inactivity of muscular power; in such cases the warm bath is often a certain remedy. It ought to be practised twice a day; after which the body must be kept warm by such exercise as can be taken

within doors; so that it may be gradually brought to the common atmosphere. This glow may be assisted by flannel cloathing. If the warm bath is tried in cold weather, the transitions ought not to be great at once, either before or after its use. A range of baths of different degrees of heat, would best answer this purpose; where the patient might begin with 84°, and ascend to 110° if necessary.

The warm bath is to be considered as a means for applying the stimulus of heat by immersion, when it would be improper to derive it from the atmosphere; which cannot well be done in our latitudes, without at the same time injuring its respirable quality. It is of eminent advantage in that harsh, impervious state of the skin, which often accompanies weak digestion; where the stomach and bowels become torpid from sympathy with the surface. No relief is obtained in such cases, if a free perspiration does not follow: so liable are dyspepsia, and the suppression of the cuticular discharge, to alternate with one another. The soothing sensation which it gives, and serenity of mind which it inspires, are the index of the good effects of the warm bath.

But where these are not felt, but on the contrary an increase of dejection and weakness, they are proofs of its doing harm, and it must be given up. When the warm bath does not agree, it is surprising to see how quickly it debilitates ; so that it cannot be persisted in long with safety. I do not not presume to decide whether the natural thermal waters, such as Bath and Buxton, or the water heated by artificial means, ought to have the preference. But it ought to be remembered, that a journey to and from these places of public resort, must be advantageous to an invalid: and the change of scene, chearful company, and gay amusements, which they afford, cannot but be beneficial to the body and mind of a nervous patient.

When employed as a physician of his majesty's fleet, I made many attempts to get our naval hospitals furnished with suites of baths: but all my applications were in in vain. Few public infirmaries in England, though some of them are well supported, can boast of these useful appendages. Yet cold lavation of the body must be allowed one of the best adjuvants to health.

Mineral waters are another form of water conveying medicinal powers to the body. They may be considered either under the prevention, or treatment, of nervous diseases. But they are more commonly used by the infirm and convalescent, than by those labouring under severe disease: they will therefore be noticed with most propriety in this place. I shall have occasion to speak of some of their ingredients as medicines, under the treatment. There can be no doubt that the efficacy of *mineral waters* is very considerable in many cases of indigestion, nervous debility, and those variations of it, usually called bilious. The *ferruginous*, or those impregnated with iron, are the most valuable: and where this principle happens to be joined in the same water, with some salt of a purgative quality, as that of Cheltenham, in certain nervous and dyspeptic habits they are peculiarly useful. Where occasional icteritial symptoms prevail, from obstruction of the biliary ducts, whether from spasm, mucus, or other causes, which retard the peristaltic motion of the intestines by the bile being deficient, such combinations of iron and purgative salt, have the

best effects; as the laxative power of the one does not interrupt the invigorating quality of the other. Iron dissolved in water by the chemistry of Nature, seems to act more powerfully by its extreme diffusion: and as in this state of solution, it is capable of circulating through the minutest vessels, its stimulant and strengthening powers are exerted on the remotest parts of the system. Much of the operation of chalybeates may be by chemical union with the fluids of the body, but there can be little doubt that they also directly stimulate and excite the nervous substance. In those persons whose cold extremities and pale complexion indicate a languid circulation and poor blood, besides weak digestion, chalybeate waters often perform wonders. But where there is much colour on the surface, and a florid blood, I think them improper.

There are however many cases of nervous indisposition, for which the waters impregnated with the sulphurated hydrogenous gas, and a neutral salt, are to be preferred: such are those of Harrogate and Moffat. Where cutaneous eruptions or defædations, are troublesome, or apt to al-

ternate with the dyspeptic and bilious symptoms, these hepatised or sulphurous waters, seem the fittest. They may also, at the same time, be used as a warm bath; and their efficacy in this way is known to be considerable. These cutaneous diseases are probably much owing to the inactivity or torpor of the absorbents, and perspiratory vessels, on the surface of the body, over which this kind of water has a manifest stimulant power. I have often seen similar good effects from a prescription imitating the composition of these waters.

About the time the first edition of this work was going to press, a pamphlet, containing Observations on a Water strongly impregnated with *sulphurated Hydrogen*, that had been recently discovered at Dinsdale, near Darlington, in the county of Durham, by Dr Peacock, fell into my hands. It appears, from a train of experiments, managed with equal address and ability, that this water contains the sulphurated hydrogen, in the proportion of 32 to 19 of Harrogate; but is without any purging salt. Many trials had been made of its effects in stomach and bilious

complaints, and on those cutaneous defæ-dations, that so frequently attend, or alternate with, affections of the viscera in nervous people, and are narrated by Dr Peacock. I can now bear testimony of its efficacy, in a number of cases in my own practice; some of which were of the most unpleasant kind, and had obstinately resisted other remedies. It is a great advantage to this water over the Spa of Harrogate, that it contains no muriate of soda: for in nervous cases, and in weak bowels, we often find neutral salts improper laxatives. But if a more brisk cathartic is required, in full habits and robust people, it is easy to add the salt in the proportion we please.

This well is likely to prove a great blessing to the north of England: and the cases recording its efficacy, in the possession of Dr Peacock, are now innumerable. The little work which has announced this signal discovery to the world, is highly honourable to the medical literature of the present day; inasmuch as it shews the general diffusion of chemical knowledge as a handmaid of medicine: and a country philosopher has proved to his neighbour-

hood, that a profession, instituted for the good of mankind, may be practised with talents and success, in a village, equally as in the metropolis; while at the same time it is secured from the fashionable hypocrisy and craft, which pollute the medical character in the higher circles of life.

But while I fully admit the medicinal effects of mineral waters in these diseases, I must still reserve a share of the credit, to the relaxation and amusement that are to be met with at these healthy and fashionable resorts of company. Taken together, and properly employed, they form a most important part in our preventive practice. I know not what would become of numbers of families in this country, were it not for the enjoyment which is obtained, once in the year, at some popular watering place. The time of leaving home is wished for with impatience; and the avocations and engagements which delight them abroad, make up the chief theme of conversation till the season returns.

Nervous people ought to clothe rather warm, and guard against variable weather. If they are accustomed to flannel next the surface of the body, it must be often shift-

ed: and the body ought to be wet-sponged, or sprinkled with cold water, every morning, then wiped dry with a hard towel. Persons who practise this mode of lavation daily, know that cheerful spirits, an agreeable warmth, keen appetite, and easy digestion, succeed to it. And when through indolence or forgetfulness, they happen to leave it off, their dyspeptic disposition soon gains ground. The feet of some nervous people are very liable to be cold; but this occurs mostly with such as use no exercise; for the sitting posture checks the circulation in the lower extremities, and also disposes them to swell. Stockings made of lamb's wool, laced stockings, or at least flannel socks, elastic gaiters, and hair or cork soles, make the proper defence in winter, for the heels and feet: and while they prevent chilblains in frost, they insure the pleasure of recreation out of doors, when the ground is damp. But where one person receives an injury to health from damp ground and thick fogs, a thousand perish by loitering within doors to avoid them.

To such of the nervous temperament as complain much of head-ach and vertigo, in

full habits, with frequent heat and coldness of the head, accompanied with drowsiness and stupor; these symptoms in advanced life, are always to be dreaded. They particularly attack drunkards and great eaters, who are corpulent, have large heads and short necks. Persons of this description must correct their modes of living, if they wish to avoid a sudden death. Low diet, with entire abstinence from spiritous and fermented liquors, and much active exercise, is the best regimen for health. Bleeding, cupping, and leeching the temples, are sometimes required: but these can only be considered as temporary remedies, for frequent blood-letting favours fulness of the vessels. The state of the bowels must be lax; the sleeping room airy and cool; suppers must be avoided; the sleep should not be long, and violent passions of the mind must be guarded against.

Where nervous diseases have been brought on by *affections of the mind*, misfortunes in life, or affliction of any sort, it is obvious they must be considered as partaking more of a mental disorder. Change of scene in these cases, is commonly the first step to the cure: as by removing the

distance of all objects that have a tendency to refresh the memory, or cause association of ideas, that bring up gloomy reflections, you weaken the chain of sympathy, till it is gradually broken. It is the duty of relations and others, who may be intimately acquainted with the patient, to inform the physician minutely of every circumstance; for it must be in vain to prescribe for a mental disease, where we are kept in the dark concerning the cause. Every such case must have its appropriate management, both on the part of the medical attendant, and the inmates. Such hallucinations of mind are always to be regarded as threatening insanity or idiotism; and without a careful investigation of the antecedents, no physician can direct the treatment to advantage, or pronounce the issue. It happens too often, that the early signs of mental disquietude, which discover themselves first by peevishness of temper, and irritable feelings, have been misconstrued by relations: and a degree of harshness sometimes has been exercised upon the patient, from a disbelief of his disorder, and not foreseeing to what it was tending. The subject in all respects requires infinite

address on the part of the physician: for petulant meddlers are more difficult to be managed than the deranged patient. To treat this stage of a serious malady with doubts of its existence would be deliberate cruelty. To mock their fears, however false, bespeaks coldness of affection; and I have often seen it bring on intemperate sallies of rage: flattery answers better, for they have less jealousy where there is no attempt at disputing they are right. But there are moral and physical causes prompting these feelings, with an impulse not to be resisted: and while the mind is occupied with such sensations, it is in vain to persuade the patient that they have no reality. When people with low spirits are to be cheared and recruited by conversation, it ought always to be conducted with delicacy; and this can never be duly managed but by a person of intelligence. If the mind at any time is ruffled by neglect, when it expected sympathy, we run the hazard of seeing the whole regimen of health given up, and all confidence of attendance lost for ever. And when medicine is directed, every argument must be employed to inspire hope

of its virtues, and the certainty of its doing good. Here, as in maniacal cases, subjection and restraint have been frequently carried too far; and the patients have been driven to despair, and ended their torments by suicide, rather than submit to the lash of their keepers. If insanity is purely a mental alienation, the method of cure must turn chiefly on a mode of discipline addressed to the weakened powers of intellect. Such persons ought never to be left alone; their train of thought should be constantly interrupted; for by indulgence it acquires growth and retention. I do not see how corporal punishment can be admitted, where the reasoning faculties have ceased to exercise their authority, and where the living soul is not conscious of moral obligation. A physician who has to direct the treatment of maniacs, must live among them, that he may learn the genius of every individual case, if his discipline is to conduce to their recovery.

There are certain forms and customs of living, practised by men who are commonly deemed *models of temperance.* The striking part of a regular life, is an exact and correct division of time. Every hour

of the day has its appropriate task; and pleasure and dissipation never supplant business and duty. The temperate man goes to bed before a late hour, and uniformly rises early. Hence early hours are another term for a regular and temperate mode of living: as the contrary bespeaks a life of frivolity and insignificance. Can any human being be in pursuit of noble and elevated honours, who is found in bed at eight or nine in the morning? Such a man never yet in the world, acquired the title of either good or great. It is therefore one of the most unpardonable neglects of a family, where parents give the example of late hours to their children. What an insult to nature, to allow the sun to shine six hours above the horizon, before getting up! Late hours at night, and long in bed in the morning, are among the nursing mothers of nervous complaints. A permanent and perfect cure is never to be accomplished, without forsaking these slothful habits: and to discard them is always a part of my discipline.

The *diet* of a temperate man, or such as wish to be free from nervous and bilious complaints, is plain food, and that in mo-

derate quantity. A person ought to rise from table, cheerful, active, and refreshed with what he has eaten; not oppressed, drowsy, or unfit for motion. Where great quantities of strong malt liquor, or wine, are taken with dinner, the stomach becomes the more overloaded; and sleep is called for, to be relieved from the burthen, as an instinct of nature. An appetite not accustomed to high seasoned dishes, or savoury meat, selects for itself what is wholesome and easy of digestion. Beef or mutton are better than veal or lamb; roasted meat not overdone is preferable to boiled; but broths not too rich or superseasoned with spices, ought to be a daily part of every temperate dinner. Nervous people complain of broths distending the stomach and occasioning flatulence; but this is the language of sloth; motion and exercise soon correct this kind of uneasiness; and when the stomach has been accustomed to broths, no such effects can be perceived. The *legumina*, such as peas and beans, must be sparingly used at all times; they load the bowels and render them slow; and raw vegetables, as sallad and cucumber, are also improper. But

pot vegetables in moderate quantity, are all mild and wholesome to be used with meat. Fish and poultry without rich sauces, may be allowed: and game on the same terms. All kinds of pastry and pye-crust are difficult of digestion, and prone to fermentation and acidity; they lie heavy on the stomach, according to the common phrase: and bread, rice, and custard puddings, are the only articles of that class that should be eaten. Sound biscuit, and light well fermented bread, are to be used; leavened bread, or bread baked without yeast, in weak stomachs, produces acidity, heartburn and flatulence. Cocoa or milk, forms the mildest fare for breakfast, which ought to be taken soon after rising. A very light meat supper is often necessary to amuse digestion: but gruels, sago, arrow-root, and such like, are improper, they run into fermentation, and partake of the nature of the unfermented farinacea.

Water, or toast and water, is the best *drink* with meals; and milk and water at other times: cyder, perry, beer, and porter, create distension, flatulence, and heartburn. The quantity of wine at, or after dinner, should be small, and that diluted

with water: Madeira, when genuine, is the purest wine, and best suited to a gouty or dyspeptic stomach. Shrub, sherbet, punch, and every thing into which an unfermented acid enters, are improper drinks; *liqueurs*, and *spirits* of every description, are to be considered as Syrens, that charm the road to destruction, and ought to be rigidly abstained from.

Nervous persons do best to dine off a few dishes; and those of the simplest kind: two or three articles at most should bound their repast. They are, of all mankind, the most liable to surfeits; and when they reflect, that the very weakest parts of their constitutions, are the digestive organs, they must either be sparing in their good things at table, or expect to be punished for their indiscretions. There are few of the number, who have not had experience of this truth.

Having recommended a milk breakfast, I am aware that many objections will be opposed to it. I have been often told the stomach could not bear it. If a physician is pliant enough to yield to such excuses, he runs a poor chance of doing any good in these disorders. This is the common

language of persons who have worn out the excitability of their stomachs, by strong green tea and other improprieties of diet. The soft bland milk does not convey to them that warmth which they have been accustomed to receive from more stimulating fare. But let them be encouraged to persevere; and as this alteration of breakfast, is only a part of a greater reversion in modes of living, it will not fail in the end to be agreeable. I must on that account caution them against any mixture of spirit, or even spice, in their milk. But if the acidity afterwards should be troublesome, they may with ease correct it by calcined magnesia, or fifteen grains of prepared powder of chalk, as the bowels may be slow or otherwise. To young women of all ranks, the milk breakfast is peculiarly adapted: and I have the authority of Sydenham, that it is the best food for the gouty.

From the experience which I have had, in some thousands of these cases, under all the variety in which they usually appear, I freely give it as my opinion, that the only *means of cure* lie in a total abstinence from every species of spirit or fermented liquor;

from every thing that bears any analogy to them, such as tea, coffee, opium, and all other narcotics; and to regulate the diet, cloathing, air, exercise, and passions, as becomes a rational being. The improper use of these articles being the *chief cause* of nervous indisposition, it follows that no recovery can be perfect, till they are *in toto* discontinued.

Attention to the state of the bowels forms an important part of the prevention: but if due regard is had to air, exercise, and diet, even habitual constipation may be overcome. What relates to its relief otherwise, will be noticed in the proper place; but if the food can be so regulated as to supercede medicine, it is an important point gained.

The whole of the precepts which have been delivered, as the means of prevention against this singular train of diseases, it will be readily perceived, turn upon a *reversed mode of living*, or changes opposed to former habits; and to bring our patients back to a simple regimen of food, air, exercise, &c. Our plans comprehend no favourite theories, nor any intricate doctrines; they

aim at being natural, simple, and easy to be understood.

Some striking instances of the beneficial effects of these rules, when entered upon with a determined spirit, have been proved in my own practice. A few years ago, when it was my good fortune to be honoured with unbounded confidence by the naval service, I was consulted by some particular friends, of great affluence, on the bad health of their wives, who, to the regret of all connected, had never been in that happy way,

"Which ladies wish to be, who love their lords."

These ladies, after being married for several years without having children, devotees of fashionable life, and a prey to painful nervous disorders, are now the mothers of healthy boys and girls, and enjoy the best health imaginable. All these happy changes were effected by little assistance from medical prescription; they were brought about by *reversed modes of living*. A few visits to their town friends, and an equal number to a provincial assembly, are all that these once gay parties now see of the fashionable world. What married woman

could refuse to quit a life of late hours, insipidity and dissipation, for such tokens of happiness and health?

Change of climate is one of those means of relief in nervous cases, that may sometimes be resorted to with great advantage. There are nervous persons who are most sensibly affected by variable weather; where the transitions are quick, particularly from settled and clear, to damp and foggy. The human nerves in such patients are like barometers: it is thus the fall of the year, in November and December, is proverbial for lowness of spirits and melancholy. A residence in Italy, or the south of France, for some time, may therefore be useful to such as can afford it. But it must be remembered, if these persons return to Britain without having made great changes in the discipline of health, they must expect fresh attacks of their complaints. A climate not too warm, where the atmosphere is clear, and the temperature equal, or not liable to extremes, is chiefly to be preferred by such people. Here again the change of scene may have a powerful influence on the mind.

From the effects which these diseases are known to produce on the spirits, there is a *moral regimen*, as it may be called, necessary for our patients, and which must remain with themselves. The person who is subject to nervous affections, can seldom promise himself long equality of health and spirits; these vicissitudes must often happen, from causes which neither could be foreseen nor prevented, and sometimes when least to be suspected. The mind, however, is not always prepared to combat sensations that impress it with ideas of dissolution; otherwise it could not so fully believe in imaginary horrors. It is a singular fact, that even men, whom I have known, renowned for valour and personal courage, and who have been familiar with danger, should sometimes be found among the number of those who conceive such dread from indescribable feelings, and torture themselves with a phantom. When these hallucinations are removed, the patients can condemn the imbecility that created their fears; yet nevertheless, on a next attack their apprehensions are renewed as strongly as ever. The judgment being thus perverted for the time, the false

perception is to be considered as a degree of delirium and temporary insanity. When the patient perceives the first approach of these odd feelings, he ought to turn his attention *instantly* to the recollection of such scenes and objects as he has been accustomed to contemplate with much pleasure, and review with satisfaction: there let him rivet his memory, and if he can raise it to extacy, he will infallibly subdue the morbid associations, and the frightful images which they present to the mind. This kind of mental controul will be difficult at first: but we have known patients who became quite adepts in the practice of it, and secured themselves from many painful struggles. It unfortunately happens in these moments, that bad actions and subjects of affliction are most apt to occupy the memory; hence it is that wicked men are said to have suffered the pains of hell in this world. Some nervous people in this state of derangement, have so magnified their own guilt, as to make formal confessions of crimes they never had the most distant idea of committing.

If when in company, any thing happens to be said, which brings to recollection

any distressing circumstance, the nervous invalid must either retire, or the conversation must be changed. And such of them as live much alone, must endeavour to regulate their train of thinking, so as to turn it quickly, the moment any thing disagreeable is called up to memory. I once witnessed a very affecting scene of this sort: a gentleman in company repeated a line from Cato,—

"Welcome my son; there lay him down my friends."

A lady in the room who had lost an only son ten years before, was immediately thrown into violent hysterics, that had nearly proved fatal. The habit of breaking up these associations gives a new relish to life; while the want of resolution makes nervous people so frequently their own tormentors. And when they acquire this manner of self-government, if I may so speak, it is surprising what confidence it gives to the mind.*

* For the following anecdote of Dr Cullen, I am obliged to the late Mr Whale, rector of the grammar school of Kelso, an eminent scholar, who had lived in Hamilton, where Dr Cullen once practised. Dr Cul-

As mankind in these diseases, are so often the authors of their own misery, *compunctious visitings of nature* must frequently recur. In such conditions of affliction, I do not see that it is at all out of character for the physician to administer even what is called *spiritual comfort.* A medical friend, who may know the value of religious duties in his own life, cannot be an intrusive monitor at a time when distress opens the avenues to the human heart; and when his professional visits necessarily attach confidence, which cannot be reposed in a stranger, and who may be less conversant in those failings that sometimes

len was subject to gout, and possessed thereby the predisposition to nervous affection, and often suffered from *demissio animi.* He had a severe attack of low spirits, perhaps brought on by narrow circumstances, and great application to business and study; when he was surprised in his *lackadasical* mood, by a friend coming in—" I am very ill indeed," said the doctor. The gentleman endeavoured to divert him from his glooms: *Do you never build castles in the air, by way of amusement, Doctor?* " Oh no, I have not even strength for that." *Did you never imagine yourself a great general, leading victorious armies to battle, and enjoying the triumph?* " No, not even in imagination did I ever fancy myself a soldier!"

bend the strongest. There are also certain delicate situations with low spirited people, that make a formal visit from a clergyman impracticable, however much it may be wished for otherwise. I believe it is a common remark of the profession, that on the sick-bed, we observe more fortitude of mind among women, than is to be found among men. We must attribute this excellence in the sex to superior virtue; and to their being educated more in domestic life, where religious and moral habits take deeper root, by being less corrupted from intercourse with the world.

Persons liable to these diseases, must be cautious how they plunge themselves into any affairs or business, where crosses or disappointments may irritate the temper. As they are commonly subject to sudden gusts of passion, a prudent and guarded command over them, is the only security for tranquillity of mind, and a smooth passage through life. The nervous frame must, therefore, trust to self regulation, in a great measure, for exemption from many painful affections, over which the powers of medicine have no controul.

Having thus finishsd the means of pre-

vention for nervous diseases, or what may be called the mode for correcting the predisposition, it will readily appear that the whole of our precepts have an equal application against the arthritic diathesis. If *gout* can be prevented at all, it must be by a rigid adherence to simplicity of living; whether in air, exercise, food, cloathing, passions of the mind, &c. and to avoid all excesses and debilitating pleasures which are known to enervate the general frame, or weaken the chylopoetic organs. I know of no distinction that can be drawn between the habits of body that give birth to gout and to nervous diseases, beyond what has been said in the preceding part of this work; and it appears that the most successful prevention of both, will much depend on its being enforced from the birth, and continued through life. The gouty constitution is certainly injured by every excess of stimulus, like the nervous temperament, but particularly by *narcotics* of all descriptions. If any fact more than another has been proved in my own practice, it is that spiritous liquors, and all wines, with tea, opium, mercurial courses, and the sexual indiscretions, are the chief

causes of the *acquired predisposition* that equally engenders both these diseases.

I come now to the *treatment*, that may be called more strictly medical. And it is to be remembered, that the *whole* of the precepts, which have been delivered under the prevention, are to be duly attended to during the use of medicine; for unless regard is paid to them, articles of *Materia Medica* are not only of no avail, but may sometimes do much harm.

Though I repose due confidence in medicine, when well timed, it is to be observed, that here the practice is directed against a diseased state of sensation and motion, brought on by causes which exert a peculiar influence on the nervous system: causes which invert all the regular operations of a most complicated set of organs; and in the cure of which the common resources of our art seem to lose their usual power. Those customs and habits which form as it were a part of Nature in the living body, are to be counteracted by

reversions in diet, air, exercise, and even mental regimen, great in proportion to the morbid affections they are intended to overcome. In the body we observe symptoms that counterfeit every other disease, forming a part of this assemblage; and in the intellectual functions we find disproportionate emotions and the most extravagan illusions.

The indications of treatment may be divided into two heads,

I. To strengthen the constitution:
II. To palliate particular symptoms.

1. To prescribe for a class of diseases, so variable in appearance, and equivocal in their symptoms, requires a full share of experience and discernment, and not a little patience in actual attendance. The physician must often take a very circuitous route to put questions to his patients, that he may learn the real genius of the distemper. He must in many cases be guarded in his enquiries, lest he excite fears and suspicions in the irritable mind, which is observant of every trifle, jealous of a whis-

per, and when once alarmed, however falsely, not easily quieted again.

I have generally found it the best way to be candid and open in my opinions with nervous people. It is the conduct which will insure most satisfaction in the end, whatever temporary embarrassment it may occasion. And I have never found it improper to inform them of every article of medicine prescribed, and to explain the effect I expected from it. By these means they will not be taken by surprise; for if they find themselves deceived once, their confidence will not be easily regained. This demeanor becomes the more necessary, as they are very apt to listen to stories of wonderful cures, and to pore over medical books, that they may compare the opinion of their physician with what they imbibe there.

In the treatment, it is always to be considered, how far these diseases are the primary complaint, or *idiopathic;* or how far *symptomatic*, and excited by another disorder. Wherever the body has been reduced to great debility, the leading features of a nervous temperament when present, will appear: and the method of cure

for the original disease, must conjoin with it the appropriate treatment of nervous affection. Many females, with a delicate and irritable nervous system, at the *period*, experience more or less of these complaints; and they subside with it. If they were even severe for the time, we are acquainted with the reason; and it would be improper to harass the patient with quantities of medicine for symptoms, that we know must decline in a day or two, perhaps in as many hours. Similar cautions must be used, when from any cause the menses cease, and severe nervous affections supervene. This may happen from pregnancy; and the treatment must be guarded accordingly; for all the signs of breeding are from sympathy between the uterine system, and the chylopoetic organs. The lying-in state, even under the most fortunate circumstances, will, for the same reasons, be often marked by a recurrence of nervous complaints. In such situations it is impossible to lay down rules, as the practice must vary according to the peculiarities attending, whether from severe and lingering labours; excessive flooding; puerperal fever; improprieties of diet or

regimen; passions of the mind; milk fever, diseases of the breast, &c. all of which will bring forth nervous affections of the most afflicting kind, such as frequent syncope, cramps, convulsions, delirium, &c. I was lately called to visit a woman, when the midwife had taken away sixteen ounces of blood, under the idea that a pain of the side was a *pleurisy:* delirium commenced immediately, with violent convulsions; and the patient died in forty-eight hours from the bleeding. In no conditions of a diseased state of body, are mistakes of the nature of a complaint, so liable to lead to fatal consequences as in the puerperal patient.

Married women who have never borne children, it is said, are more liable than mothers to these diseases. The nervous female commonly finds her health improved when she becomes a parent; from which it may be fairly inferred that the child-bearing period is favourable to the constitution. Every intelligent mind knows well, whatever cares a family may bring with it, they are more than overbalanced by the sweet solicitudes of affection which spring from them. Hence

every wife wishes to be a mother: the want of children thus grows to a misfortune, and those motives for energy of mind are neglected. But if this misfortune has been owing to nervous indisposition, brought on by any cause which has been assigned in these pages, if it be at all remediable, the means are obvious, and easy to be employed.

When these diseases appear about the age of puberty, at a season when delicate changes take place in the system, we are then aware of the event, and can calculate upon their decline. Their appearance at this time of life, is marked by a singular train of phenomena, all depending on a mobile condition of nervous power, as the body acquires the possession of new passions and new faculties. The generic names of *chorea* and *chlorosis*, have been given to these diseases; but I hold them nothing more than traits of the nervous temperament. *Chorea*, or *St Vitus's* dance, commonly begins some years before the age of puberty; and in both sexes it seems to decline as soon as the body has acquired its stability, and the sexual organs are fairly evolved. It consists of involuntary

motions of the extremities, and sometimes of the muscles of the face, appearing like antic tricks and gesticulations; but there is also more or less of dyspepsia. I have seen some instances where convulsions and delirium of a singular kind attended this disease.

The predominant symptoms of *chlorosis* are muscular debility, sallow skin, indicating deficient oxygen in the blood, and great derangement of the chylopoetic organs, with other symptoms of dyspepsia and nervous affection. There is commonly a desire for eating dust, chalk, or lime, and probably depending on excessive acidity in the first passages. As this complaint chiefly appears about the age of puberty, it has justly been considered as having some connection with the evolution of the sexual system: and years of bad health sometimes follow, before the menstrual discharge is duly established. With this all the dyspeptic symptoms disappear; the mammæ swell, and the countenance resumes its rosy colour; the body recovers its muscular strength, and the shape is moulded into all the softness of form and beauty. But at the same time, it ought

to be remembered, that the male constitution, at puberty, is also frequently subject to chlorotic indisposition. As *chorea and chlorosis* indicate the presence of the nervous temperament, I have nothing particular to offer on their treatment; it falls entirely in with our general plan. These complaints are another confirmation of that intimate sympathy which subsists between the sexual organs, and the chylopoetic viscera. There can be nothing strange in these symptoms appearing in an aggravated form at this age, where the nervous power is very mobile; for we find other symptoms sometimes at an earlier period, that are usually considered as the disease of riper years, namely, the *fluor albus*. I have at this moment two children of seven years of age, now convalescent of that complaint, with all the signs of hereditary nervous predisposition.

In directing forms of medicine for our patients, there is one rule must be carefully attended to,—not to sicken the stomach by beginning with a large dose. If the digestive organs in their deranged state, are incapable of acting on the food, how much more may they be oppressed by a

nauseous medicine. This article, as well as the diet, must undergo the digestive process, if it is to be useful; and it is the business of pharmacy so to prepare it, that it may best answer this purpose. It is not that a medicine is to be sweetened to cover its bad taste, or warmed with spirits, that it may afford a grateful stimulus to an exhausted stomach: it must be exhibited in a state wherein its powers may be most effectually exerted on the nerves of that organ; or so easy of decomposition, as to combine readily with the animal fluids, and yield its qualities to be conveyed by the circulation to remote parts. Cinchona, or Peruvian bark, so often prescribed in nervous and dyspeptic cases, has been sometimes given to the amount of two ounces in substance in twenty-four hours; and because the stomach did not reject this enormous load by vomiting, it has been triumphantly exclaimed, that large doses only could do good. Such a quantity could only produce torpor and insensibility; its active qualities could not be exerted as a medicine on the gastric nerves; for what solvent in the stomach could effect its decomposition? For my own part,

I have never met with patients who could retain such quantities of bark. It appears to me much more rational to begin with small doses, and to watch its effects. Hence we learn that decoction and infusion will sometimes succeed, when the powder has failed. These forms seem to derive still further power, by being conjoined with some of the alkalies, the carbonate of lime, (chalk,)or magnes. ust. all of which not only increase its activity, but cause it to sit easy on the stomach. The pharmaceutical treatment of most of the bitters more or less resembles that of cinchona.

It is sometimes necessary to premise a *vomit* or *purge*, or both, before the use of strengthening remedies, as the stomach and bowels in their irregular state are often loaded with phlegm and mucus to a surprising degree. Besides, the capricious flow of the bile into the duodenum is often the means of rendering different portions of the intestinal tube torpid, or irritable, as it happens; and an active purgative will always have considerable effect in restoring the equal motion of the bowels. As an emetic, I prefer the ipecacuanha, to be

assisted by a weak infusion of camomile. As a gentle purgative I prefer rhubarb; and when a quicker one is required, I employ pulv. jalap. With each of these I uniformly combine magnes. ust. kali or soda. These not only correct acidity in the first passages, but also render the active parts of the other articles more certain in their operation; they also become solvents of the animal mucus so often accumulated there.

After the primæ viæ are thus cleared, we may with safety begin the corroborant medicines; being always cautious in selecting and combining them with such stimulant and adjuvant ingredients, as may make them easy to the stomach, and adapted to the constitution. It is impossible to lay down rules for what is to be directed by experience in every individual case: but it will often happen, that the same article which does harm under one *formula*, will be eminently useful in another. And in suiting the medicine to the exact condition of the stomach, the success of the practice will be more or less compleat. The physician will but too often find reason for remonstrating with his patient on

neglecting his injunctions, whether in air, diet, or exercise: a watchful eye must therefore be kept over the regimen, that medicine may not fall into unmerited discredit.

The strengthening medicines which have been chiefly employed in these diseases, are *iron*, *Peruvian bark*, and *bitters*; but *zinc*, *copper*, and even *silver* and *lead*, have been used. And the mineral acids, *sulphuric*, *nitric*, and *muriatic*, have on some occasions been deservedly praised in many dyspeptic stomachs.

Iron very properly is considered as the first article in this class. Its reputation is very ancient, and physicians have been uniform in extolling its powers; they are certainly in some shades of these diseases truly wonderful. There are few of our patients whose habits of body contra-indicate its exhibition; but it is commonly forbidden where there is much strength and tension of muscular fibre, and a florid dense blood. Such a state of body is seldom met with among the nervous, bilious, and dyspeptic: but we have frequently been obliged to lay aside the use of chalybeates for the very reasons just assigned.

Sydenham, who seldom erred in practice, preferred iron in its metallic or oxide state, to all its other preparations. I can readily join in the praise which the English Hippocrates pronounced on this celebrated strengthener; but there are certainly conditions of the system in nervous diseases, in which some of its saline combinations are to be preferred. In some female habits where there is vast disposition to acidity of stomach, the limatura ferri, and carbonas ferri, will act most powerfully. And there is reason to suppose, that this very acidity of the primæ viæ, further oxidates the metal; by that means destroys itself, and leaves the iron in a more active state to strengthen the fibre, or to mix with the blood, and exert its efficacy on the whole circulation. But in cases where there is little or no acidity in the first passages, the muriated tincture of iron, and vitriolated iron, have appeared to me to have manifest advantage. Again, in cases where there is much torpor, or as you may call it, sluggishness of fibre, and coldness of constitution, with accescency, then the ferrum ammonicale, or the tincture made from it, are of superior efficacy. Some of

the most fortunate recoveries which ever occurred under my own prescription, were effected by the ferrum ammonicale. In these cases, violent pain of the gastric region, occasional jaundice, flatulent colic, shifting spasms of the whole abdomen, vast acidity, vertigo and head-ach, &c. were the predominant symptoms. Yet most of these cases were reduced to the last degree of debility before I first saw them. Certainly in stomach and bilious complaints, under extreme weakness, very unexpected returns to health sometimes take place, by a fortunate change of medicine: it must therefore be a point of nice discrimination in the practice, to suit the preparation of this metal, to the exact disposition of the disease, and the idiosyncrasy of constitution.

When I employ chalybeates of any description, it is usual with me to precede their use, for a few days, with some preparation of bark or of bitters; and to continue them for two or three weeks with the ferruginous medicine. After a short interval, they may be again renewed, as circumstances require. In this manner the two articles will effect what neither of them can do alone. But I am of opinion, with many

other physicians, that ferruginous medicines of all kinds, ought to be continued for a length of time, if full benefit is to be derived from them. Even where the good effects are early apparent, they must not be too soon laid aside: from three to six months are often required to insure all the good that may be obtained. All the different forms of iron are apt to make the bowels slow; which with some patients is a constant objection to their employment. Even the sagacious Sydenham went so far as to say that laxatives ought not to be given during their use, as weakening their efficacy. It is however to be remembered, the diet of Englishmen in his days, was not so full and pampering as in the present times. This opinion of Sydenham has however had very little weight with me: I not only interpose laxatives during the use of iron, but sometimes order a smart purge at intervals; and so far am I from thinking that it weakens the power of the other medicine, I have always thought it necessary for securing its best efficacy. The office of the intestines must be preserved regular in such patients, if any good is to be done. The kali tartar. is perhaps the best purga-

tive article at this season; and it may have some action on the chalybeate that we cannot well explain. If, however, our regimen of air and exercise is strictly complied with, there will be the less necessity for forcing the bowels by medicine.

When iron is adapted to the case, the good effects are first observed, in the decline of the dyspeptic feelings: the calls of appetite become more frequent; the food digests with more ease, and acidity and flatulence cease to be painful. At this time the colour of the face improves, and grows florid; and the skin from being sallow and dry, becomes better coloured, soft, and perspirable; the alvine fæces are commonly tinged during the use of iron. With these changes, strength of body and alacrity of mind soon appear. In delicate females, some weakening sexual symptoms quickly decline.

The indisputable good effects, which have so often resulted from a trial of the *Bath waters*, in many varieties of these diseases, render it almost certain, that these have been produced by the ferruginous principle which they possess: but which is only effectual at the fountain, as

it soon precipitates, and cannot be preserved. As we perceive this metal, when artificially managed, to effect surprising changes in the animal economy, it is but fair to allow, that much more may be expected from the fine chemistry of nature. It is in vain to deny this, because the Bath water contains an extremely minute portion of iron, discovered on analysis: the effect must rest on the activity of the ingredient, whether in the state of oxide or not, not on its quantity. The sensible qualities of the water, when drank on the spot, are highly ferruginous; and the stimulant power is so perceptible, that in some habits of body, it is dangerous; inducing temporary fever and vertigo, and in some instances apoplexy. The torpid habit is, therefore, most relieved by them; persons worn down by the diseases and excesses of tropical climates; and those debilitated by luxurious and high living at home. The regular hours, correct manners, and elegant pleasures of the company, at this fashionable place of resort, become the best antidotes in life, against licentious drunkenness: no wonder then the enervated debauchee should return healthy,

and sometimes reformed, from a course of Bath waters. But when nervous, bilious, and dyspeptic complaints depend, as they often do, on a *gouty diathesis*, Bath waters are a sovereign remedy. The energy which they quickly impart to the chylopoetic organs, is soon extended over the whole frame; and all those anomalous symptoms, usually called *flying gout*, seem to rally to a point, and cease, when the affection comes to be fixed in the extremities. I am thus induced to mention these salutary springs, under the method of treatment.

With respect to the effects of the preparations of *zinc*, *copper*, *silver*, *and lead*, which have been tried in these diseases, excepting the first, I have little experience of them. I have frequently combined the *oxide* of zinc with *carbonas ferri*, and other forms of iron, certainly with great effect; but not more than what is daily seen of iron by itself. A farmer lately brought his son to me, who by the description, had been subject for six weeks to fits three or four times in the day, that were epileptic. He said he was returning at night to his father's house, and in a thunder storm was

struck down by lightning. He was an hour and half in getting home, though not more than a mile from the place; and being insensible, he did not know where he was till morning. I found he had an hereditary nervous temperament, and many severe dyspeptic symptoms. I ordered iron, zinc, and cinchona, in the form of electuary. After the first three doses, the convulsions ceased: but he took his medicine only a fortnight, and the fits returned. He refused to go on with it, and I saw him no more. In this case I was guided in the practice, by the dyspeptic stomach and predisposition. Of the *cuprum*, *argentum*, *et plumbum*, I have no experience. The iron is my grand safety. I fancy the resources of *materia medica* are sufficiently abundant at present; the best physician must be he who can best select, and best prepare what we now possess.

The *cinchona*, or *Peruvian bark*, stands foremost in our list of medicines taken from the vegetable kingdom. No article of materia medica has acquired equal reputation; but it is the fate of this medicine, to be often dispensed from the hands of ignorant people, by whom neither the disease, nor

the nature of the bark, are understood; and it must frequently do harm. Some attention ought certainly to be paid to the manner in which it can be exhibited with most effect. The powder has been said to be the most effectual form; but there are many stomachs that cannot bear it in substance. If, therefore, small doses do not sit easy, the infusion or decoction must be tried; and it is the best way to begin even these in small quantity. To exhibit the bark in tincture in these complaints, is an inconsistency in practice: it is no doubt very grateful to some stomachs, but let us remember we are pouring into the body one of those narcotics, that is daily bringing nervous afflictions upon thousands. It is, however, sometimes necessary to add a small proportion, to preserve the watery preparation from spoiling. It frequently happens that bark acts purgatively, and passes rapidly through the bowels; and laudanum has been the common corrector of its purgative quality. But I object to opium in any form, in these diseases, unless we are compelled by urgent pain. I have always found *creta preparata* or *testæ prepar.* sufficient for this

purpose: for it would appear, that this effect of bark is chiefly to be met with in those subject to great acidity. I even find it necessary to combine *ammonia* with bark; as both chalk, magnesia, and the fixed alkalies, are sometimes incapable of subduing the vast acidity in the first passages; and I think this is frequently one of the best additions to the other. In my own practice, I have long considered these anti-acids, when well-timed, as the cause of my success. With respect to aromatics, as adjuvants to either the bark or bitters, their good effects are very doubtful with me. I wish to exclude from medicine, as well as diet, every thing that is warming; and I have a strong suspicion that aromatics invert the action of the fibres of the cardia or upper orifice, and thereby occasion belching, which is falsely said to be useful.

When the extract of bark is genuine and recently prepared, it will be found, in some cases, to succeed, where milder forms of the medicine have failed. I have given it in both pill and solution with great effect. I combine the pill with a third of gently calcined soda; and I think, by thus converting the extract into a kind of soap, the

solution of it in the stomach is more certain and equal, and the effect much increased. This form of pill answers very well with all the bitter extracts, such as gentian, camomile, &c. The distilled water of peppermint forms a good vehicle for the solution, and the extract mixes perfectly, when a due quantity of kali prepar. is triturated with it.

When bark or bitters produce constipation, laxatives may be aptly joined with them. I prefer rhubarb and jalap, though I have no objection to kali tartar.

Next in power to cinchona I reckon *angustura bark*. This article has not been long in use in this country; it is certainly a valuable addition to *materia medica*. It is a rougher medicine than the bark, and ought to be given in smaller doses; and in those stomachs where it sits easy, it acts powerfully in subduing dyspeptic symptoms. It may be therefore proper to begin with infusion and decoction, joining to them magnesia ust. and the alkalies, as in the pharmaceutical treatment of bark. Angustura, from its astringency, is more apt to bring on constipation than bark, so that some of the milder laxatives, such as

kali tartar. may be advantageously taken with it: and for this reason it is better adapted to those cases of nervous affection, where a laxity of bowels forms part of the disease. It is also an excellent anthelmintic, and may be given to children subject to worms, in the morning fasting, triturated with magnesia and soda, preceded and followed by a brisk purge, as directed before.

The *gentian root* is perhaps one of the best pure bitters in this class of diseases. The compound infusion of the Pharmacopeia Londinensis, vel Edin. is the most advantageous form to employ it, to which may be added magnes. ust. carbonate of lime, or the alkalies. When bitters are first tried, they are apt to sicken some stomachs; but this should be remedied by lessening the dose. It is true that a pill of extract of gentian and soda, as directed before, is more easily taken; but I think by this change we lose considerably in the value of the medicine. All bitters seem to act most powerfully when largely diffused; where there is much acidity as the effect of fermentation of the food, with great flatulence from the same cause, they produce very sudden relief. It is known that bit-

ters chemically check the fermentation by some antizymic power, and correct acidity by the same means. I never permit the use of any of them beyond sixteen days at a time.

Colomba root has become a favourite medicine in these diseases, with a number of physicians in this country. It is certainly a very agreeable bitter, but I think in effect less than gentian. It has been said to be particularly useful in bilious cases; but it does not appear, even in that trait of the nervous temperament, that it surpasses other bitters, however successfully given, where there is much uneasiness from indigestion, acid eructations, and distention. I would recommend the same pharmaceutical treatment of colomba, as mentioned of gentian. Camomile, santonicum, wormwood, quassia, &c. are all of the bitter class, and resemble one another in virtue. It is certainly an object in practice to chuse the most powerful, which is gentian. A very valuable addition is now made to this class by the *salix latifolia*, which answers well in decoction, to be taken with any of the ferruginous preparations. Articles of the growth of our own soil ought to be en-

couraged by all medical people. See an ingenious Essay on this medicine, by Mr Wilkinson, of Sunderland.

2. I come now to the second head of treatment, viz. *To palliate particular symptoms.* This is sometimes a difficult task, in these diseases; as what tends most to give immediate ease, is what must inevitably have the effect of increasing the predisposition, and endangering the return of the complaint in a more aggravated form. Such I conceive to be the effects of ardent spirit, opium, and all other narcotics. To a person who reflects properly on the horrid effects of dram-drinking, nothing can be so disgusting as to see spirits swallowed in an undiluted state. It is therefore my solemn opinion, that they ought never to be resorted to on trifling occasions; for when often repeated, even in the hands of the most cautious, they cannot fail of injuring the stomach. They moreover undermine health by favouring the attachment to spiritous liquors. And such is the effect of opium, that many women subject to hysteria, are very apt to be seized with a fit, whenever they take a dose of laudanum. I have known numberless instances of this kind; even epilepsy is

sometimes the consequence. Other women I am acquainted with, who never can use opium in any form, without a temporary delirium of the most disagreeable kind, and followed by sickness at stomach still more distressing. These extraordinary effects chiefly arise from great mobility of nervous system. Too much caution cannot therefore be bestowed, to avoid temporary palliatives, that must ultimately produce permanent pain.

In the course of my passage through the world, I have at different times known some fashionable women in high life, of the nervous temperament, who had got into the baneful habit of using opium as a *cordial.* Some of them were so familiar with it, as to carry a vial of laudanum constantly with them: a long evening could not be passed abroad without retiring to repeat the dose. The consequence of all this, as must be readily imagined, was continual bad health. Though none of these ladies were beyond middle age, yet they had all the looks of old women. It must be a grievous stain on the medical character, if such habits took their beginning from any inconsiderate practice of a medi-

cal attendant. I am afraid the profession is not free from this imputation. A man who carries for ever on his face the sleek simper of artful insignificance; who has a bow and a smile ready for every person that addresses him, will be very apt to accommodate his prescription to a fashionable folly.

The first step to health is to avoid the cause of disease. But there are some physicians who contend that it is hurtful for habitual drunkards to leave off the bottle at on e. Were the habit of dram-drinking a salutary practice, there might be some truth in this dictatorial precept. But as ardent spirit is a strong poison to both soul and body, and forms no part of that nourishment which can be converted into animal matter, I have never been able, after the most unwearied application in the exercise of my profession, to find a single fact in support of a doctrine so destructive of moral and physical health. Whenever I have known habitual ebriety completely overcome, it has been where all species of liquors were given up *in toto from the first.*

The delirium which succeeds the paroxysm of ebriety, is of two kinds, the *phrenitic* and the *nervous.* The first bears

bleeding and other evacuating means: the last is to be treated by stimuli. But wine or spirits should never be used; as bringing up to recollection the pleasing sensations which precede drunkenness, and connecting those associations which it is the province of medicine to break asunder. When there is much watchfulness, and little inclination for sleep, in the nervous delirium, opium in due doses must be given. But nature in this case, as in many others, with nothing beyond the usual stimuli which accompany temperance, recovers the powers of reason: the conscious pleasure of resuming sober habits, as a mental excitement, must be one of the best on such occasions. The treatment of phrenitis does not belong to this work.

The most painful symptoms which attend nervous indisposition, are those *cramps and spasms* which particularly affect the stomach, bowels, kidnies, ureters and bladder. In the female subject they are most apt to occur at the *period*; and often commence in an instant. Such women ought to be careful about the state of the bowels and stomach at that time, with respect to the kinds of food, and the alvine discharge; so

as to obviate acidity, flatulence, &c. the painful companions of that state. The amenorrhœa, or suppression, from whatever cause, is also remarkable for the recurrence of these symptoms, which are seldom fully relieved till regularity is restored. The condition of mind is worthy of great attention at that time; for every ruffle of passion creates mischief.

The *warm gums*, as they have been called, have been long in use for these troublesome pains, and other nervous affections. They have been administered in the form of pill and tincture; not without some confidence being given to their unpleasant flavour, a singular way of prejudging the effects of a medicine. In nothing have I been more disappointed, than in the fœtid gums; and where they have been apparently useful, it was probably from the spirit taken with them. Like aromatics, they cause eructation, which is said to be a good effect; though it is my opinion that they invert the fibres of the cardia, which is improper. Asafœtida is the foremost of this list: but it ought to be remembered, that its tincture in the modern pharmacopeias, is made with *alcohol;* and a tea-spoonful or two, however diluted,

comes to be a tolerable dram. Here the alliaceous flavour is very strong, and impregnates the breath. In the form of enema, I have, however, known the asafœtida very useful. Castor ol. animale, and musk, are prescribed for the same purpose as asafœtida: but though they may possess a stimulant power, it is very trifling and transitory; they are moreover, apt to disorder the stomach, and bring on vomiting. Camphor and ammonia are of much greater value in nervous pains; and their effects more permanent. Æther is also a common remedy, and when joined with opium and ammonia, of great service. This is a judicious mode of exhibiting laudanum, for a smaller quantity is required than when given alone. Valerian is another of the fœtid tribe, frequently ordered in large quantity, to the manifest injury of the stomach. I believe it to be a very inert stimulant. As opium is known to produce a slow state of bowels, ext. hyosciami nigri, which has a laxative quality, was long ago recommended by Dr Whytt in these disorders. We certainly by this change get quit of some of the bad effects of the opium; but hyosciamus extract must be re-

cently prepared to be active; and there is some difficulty in ascertaining the dose at once.

But when pain and restlessness become urgent, and when common harmless remedies fail, there is no resource besides *opium*. We know its sovereign powers as an anodyne, and we must compound with its bad effects in the best manner we can. We ought to combine it with such articles as co-operate with it, such as æther and ammonia, and the best vehicle is the mist. camphor of the dispensatory. But it often happens that the stomach rejects the liquid medicine, and the dry opium may be substituted. I prefer the mode by *enema;* and we may combine diluted spirit, or some of the stronger white wines with it, such as Madeira or Sherry, to great advantage. I have never been disappointed with a clyster of this sort. This also in a great measure prevents sickness at stomach afterwards.

Some other symptoms which come on suddenly in nervous cases, such as *vertigo* and *head-ache*, *palpitation* and *faintness*, do not admit of such easy relief. They commonly attend some disordered state of the

stomach and bowels, and to these the medical regimen must be directed.* The hysteric and epileptic paroxysms, are convulsions that sometimes give alarm of their

* I was lately consulted in a remarkable case of *palpitation*, in a girl of eight years old. The motion was so violent it could be seen at a considerable distance, and it was constant, though somewhat increased by violent exercise. It appeared hopeless, from the idea of organic affection in the heart: but the girl was in general bad health, and of a strongly marked *nervous temperament*. I therefore directed my advice to correct the predisposition, which was chiefly to the relief of the stomach. The next time I saw her, the complexion was entirely changed; she was grown florid and beautiful, and full in flesh. I now think, extreme irritability in the heart, with nervous weakness, was the whole disease. Similar cases have come under my observation, but none so violent as this: yet it is surprising to see to what a height this symptom will arise in female habits. An *appeal* to the ruling temperament must therefore be always a safe resource to the physician. On the same principles, I have just dismissed, cured, a case of *epilepsy*, in a youth of sixteen, an apprentice in this town, which threatened to be permanent. He had no fit after he began his medicines. But in order to make great changes in his modes of living, I ordered him to the country, with many alterations in diet, &c. during the treatment. This complaint, I since find, is very common among young men confined in shops, many of whom have applied to me.

approach; but at other times their attack is instant. We certainly possess no medicine that either prevents or shortens these convulsions. I have seen epilepsy checked by the ligature round the thigh, when the sense of the *aura*, as it is called, was ascending the thigh: but in other cases the ligature did not check the *aura*, or prevent the fit. The only treatment which I can recommend here, is the whole rules of prevention; which improve the health, by abridging the predisposition. If, as I contend, epilepsy is the offspring of the nervous temperament, the force of that must be lessened; and all cures of this convulsion by any particular article, can have no real existence.

Acidity and flatulence being two of the most painful symptoms attending these diseases, the common correctors are well known: they ought to be obviated as much as possible by diet, which has been sufficiently explained. The *aerated soda water* has now become a fashionable morning draught for the cure of acidity, after a debauch of wine. It is really to be met with in coffee-houses, as if it had never been manufactured by the apothecary, and it is humilating to the physical vigor of Britons to

see such degeneracy; a medicine converted into a tavern beverage! But it is worth mentioning, that a long use of this water hurts the stomach and kidnies, and produces very serious cutaneous diseases, so as to injure the skin.

The disease called *Tympany*, is a common attendant of nervous temperament. I have lately had occasion to see some extraordinary cases, one of which was of long standing. The treatment here, has in it nothing different from our general means of prevention and cure.

I must beg leave to caution persons subject to nervous and stomach complaints, about repelling *eruptions on the skin*, especially of the face, by any severe means. These cutaneous affections are commonly associated with the dyspeptic disposition, and when imprudently forced from the surface, never fail to aggravate the internal disorder. The best way is to leave them to the general treatment. It is true, they are particularly disagreeable to women; but as they are a part of the original malady, so they usually yield with it. Of this patients should be duly warned; for many constitutions have been ruined by the use of those articles vended under the specious

names of creams, dews, honeys, &c. all of which contain mercury, lead, or some powerful astringent, that repels the pimples at an improper period. When stomach complaints have been rendered more severe by this cause, the first and best relief is to recal them to the skin. The warm bath, particularly of salt or sulphur water, is one of the most effectual means. But some medicines of the sudorific class, such as camphor and ammonia, joined to bark and iron, with warmer clothing, and exercise continued to the sweating stage, will also have considerable effect in restoring the eruption.

Morning sickness and vertigo are common with some of these patients. They are felt immediately on standing erect, and sometimes bring on retching and faintness. These symptoms are chiefly to be imputed to the empty state of the stomach from long fasting. They are best relieved by some tasty food, such as cold ham, cold tongue, &c. taken before getting up. But warm tinctures and medicines of any sort ought never to be resorted to. By way of preventing this sickness, I commonly direct a small supper of meat at going to bed, so as to amuse digestion, and breakfast im-

mediately on rising. In the early months of pregnancy, morning sickness is a troublesome attendant: but as the cause cannot be corrected immediately, the only alleviation is watching the state of the stomach and bowels.

Want of sleep or wakefulness, is one of the most distressing companions of nervous affections: indeed some persons appear scarcely to sleep at all. Cold ablution of the whole body a little before, or immediately on going to bed, is one of the best means which I know, to procure refreshing sleep in these situations. Some people find great advantage from what has been called the *air-bath;* that is to get out of bed, and walk to and fro in the room, quite naked, for ten or fifteen minutes. After growing warm in bed, drowsiness and sleep soon succeed this kind of noct-ambulation. But sufficient bodily exercise, with moderate mental recreation, is certainly the most salutary and natural mode of inducing sound repose. I think opium can scarcely be admitted here. The general warm-bath, semicupium, and pediluvium, may also be tried.

The external applications which are employed in *cramps and pains*, consist of blis-

ters; camphorated oil; ammoniated oil; vitriolic æther; saponaceous liniment; mustard flour; warm flannels; bottles and bladders of warm water; hot bricks; friction; dry cupping, &c. The last remedy is often found useful, where there is much pain, with coldness of the part; as by favouring the influx of blood, and thereby exciting heat, it proves stimulant. With the same intention, *electricity* is often employed to advantage; and to this we may now add *galvanism*. The warm bath may also be considered a valuable remedy in local pain, and may be practised with the restrictions formerly delivered. The vapour bath, in effect, comes near the nature of the warm bath: but pediluvium being easier accomplished, generally supercedes both the others.

The *strangury*, and other complaints of the urinary passages, are best relieved by the fixed alkalies, ammonia, æther, and camphor, exhibited in aq. menth. pip. with the milder bitters, and large dilution. These symptoms are apt to accompany excessive acidity and flatulence of the first passages. I have known cases of this kind becoming truly alarming, from the great delicacy of the patient. This symptom is peculiarly

frequent with women subject to the hysteric affection: active exercise in the open air is the best preventive. I know not if mucilage can have any effect here, beyond dilution from the water taken with it; but even that may be useful.

The *dyspnœa and asthma*, or diseased respiration, which accompany these complaints, are often troublesome. The flatulence of stomach frequently impedes the motion of the lungs and diaphragma, mechanically; but when the bronchiæ and air-cells are contracted, so as to make the breast labour, and induce a wheezing of breath and change of voice, they must be considered as sympathetic affections. Several of the stimuli, such as æther and ammonia, are sometimes exhibited with success; but I would recommend the treatment to be directed against the disordered condition of stomach; which, if properly directed, will seldom fail of giving relief.

It remains for me to consider the treatment of the *bowels*, so generally *slow* in persons of the nervous temperament. To preserve the alvine discharge regular, is an indispensible part of our office. The sto-

mach and bowels being the chief seat of nervous and bilious complaints, much of the inconvenience and pain occasioned by constipation is to be referred to their weakened state; joined to the scanty or vitiated bile which is sent from the liver, as that organ partakes by association and sympathy with the intestinal tube. By an inversion of the action of the muscular fibres, the peristaltic motion is interrupted; is torpid in one place, and increased in another; which irregularity compresses the flatulence into particular portions of the canal; creates distention, uneasiness, and pain; and very frequently gives the evacuation much difference in form, consistence, and colour. These appearances sometimes impress the patients and nurses with extraordinary dread and apprehension of the disordered state of the bowels. While the nervous power of the intestines thus acts tumultuously, and in insulated portions, violent constrictions are apt to happen, which give birth to the symptoms of *colic*: and at other times the mind is more particularly alienated, and what is called *hypochondriacism and vapours*, are the consequence.

It is devoutly to be wished that the bowels could be kept in due action, by diet and exercise, without the aid of medicine: but so many causes conspire to defeat this purpose, that nothing is so difficult to be accomplished. Such patients have generally long accustomed themselves to some purgative medicine, often one of the most improper kind; and it is not easy to convince them they have been doing wrong. Among these habitual purges, calomel and aloes are the most frequent in use. As these articles, as well as all other cathartics, are not directed against the radical cause of the evil, they can be considered only as giving temporary relief. But mercury in any form cannot be long used by persons of weak viscera without harm: and aloes is a medicine of the drastic kind, that produces great irritation in the rectum, tenesmus, and is apt to bring on *procedentia ani*, piles, and fistulous sores. But purgatives of every description, when frequently resorted to, exhaust the stomach and bowels, and never fail in adding to the cause of the complaint. It must, therefore, be a great misfortune

where the body is never moved without the aid of medicine.

Such a habit as this ought to be early guarded against, where the disposition to costiveness is hereditary. This can be done only by a strict attention to that regimen, which is enforced in the former part of this work. Parents alone can effect this. It must be grateful to every medical attendant of a family, when it is known that a predisposition to these diseases prevails, to remind the father and mother of the necessary rules of prevention. Such an office will reflect great honour on the professional character, as it will prove an honest disregard of emolument, when the welfare of their friends, and society itself, is so deeply concerned. Where medicines are required daily for children, in the state of slow bowels, the prospect in advanced age must be dreadful.

The diet, in the constipated state of body, ought to consist of a large proportion of fluid aliment; in severe cases it ought to be entirely of this kind, with vegetables easy of solution. What solid butcher-meat is taken, must be masticated slowly before swallowed, which will promote the flow of

saliva, assist its comminution in the stomach, and facilitate its passage onwards. I am well aware that very great obstacles will be opposed to these precepts: some will speak of their dislike to broths; others that soup disagrees with them; some will be afraid of borborrigmi, and others of their shape. But for the last two objections, exercise, not physic, is a certain cure; and with respect to the two former, if health is of so little moment that no pleasure is to be sacrificed for it, things must remain as they are. The quantity of bread to be eaten must be very small; no pudding where flour forms a part, can be admitted; custards and such like are allowed: all pastry is excluded; and all the legumina, such as peas and beans, are forbidden. These restrictions are directed, because whatever increases the bulk of the fœcal mass, imposes a heavier load on the peristaltic motion of the intestines, and consequently a slower action. Where fruit agrees, it may be indulged in *ad libitum*. All vinous and spiritous liquors are to be given up, in conditions of torpid bowels: they all act by exciting the absorbents in the stomach and intestines; and thus de-

prive the refuse of chylification of that fluid that makes it pass equally and easily along.

We ought to begin with the milder laxatives first, and so ascend to the more active; to reap full advantage they must also be often changed. The gentlest are manna; tamarind infusion; electuary of senna; senna; rhubarb; tartarized kali; jalap; aloes; scammony; jalap and one tenth of calomel; scammony and one tenth of calomel, &c.

It is sometimes observed, that nervous and bilious people grow corpulent and full: this is generally owing to rich food and indolence; and it is a bad trait of the temperament. Such persons, however, never bear bleeding well, even under some apparently inflammatory disposition. The best plan here, is to reduce the body by low living and exercise, if these can be accomplished. But nervous persons are the most intractable of all good livers, and have less resolution to abridge their enjoyments. They not only indulge in large quantity, but that is commonly seasoned to the highest degree of stimulus. For my own part I would sooner encounter the preju-

dices of any sick man, rather than those of a nervous glutton. Every surfeit brings additional trouble to the physician; and he will often hear the appetite complained of, when a single dinner ought to have made three. Nothing stands more in the way of a regular medical discipline than errors of this kind, and it is necessary to observe a sharp sighted jealousy over them.

When, as has often happened, I have been consulted for cases, that seemed beyond the reach of medical assistance, I have seen great advantage obtained by directing the treatment solely against the nervous predisposition. This has frequently happened in those desperate afflictions, the cancerous uterus and mammæ; and I have sometimes thought, had the rules of practice been tried sooner, even in such situations a cure might have been effected. A perfect knowledge of the *temperament*, in my opinion, forms the only basis for a successful treatment of all nervous and

bilious diseases so called; it leads us to the fountain head; unfolds the source whence the evils flow, and puts us in possession of the only means for prevention and cure.

APPENDIX,

Containing some remarks on stomach affections, gout and on the disease commonly called HYDROCEPHALUS ACUTUS, *or* "*Internal Dropsy of the Brain.*"

IN the earliest ages of medicine, and down to the present times, there seems to have been a prevailing wish among physicians, to fix on some general condition of body, as giving birth to a particular disease; or to a peculiar train of morbid phenomena. The terms moist and dry; cold and hot; phlegm, salt or sulphur; acid and alkaline; phlegmatic, sanguineous, atrabilious, melancholic, &c. are used, as denoting the deficiency, or excess, of some quality, principle, or humour, in the human body, on which depends the original

and certain character of a diseased state. A more perfect knowledge of the nervous system, as the fountain of sense and motion, has introduced a more correct pathology; hence we are enabled to explain the causes of disease, and the effects of remedies, with greater certainty. But till the laws of our sentient system became sufficiently known, the class of diseases treated of in this work, were scarcely attended to. If there is ever to be found in the practice of medicine, a sure conducting principle, it is to be derived from this source, as it unites the effect of both mental and corporeal causes on the human frame. This, in fact, is nothing more than what in common language is called *the knowledge of the patient's constitution:* that is, the discovery of the peculiar *temperament, or idiosyncrasy* of the sick person.

It was on these principles, that this work was undertaken. And with a view to furnish the history of the NERVOUS TEMPERAMENT with every fact necessary for its illustration, I have analized the condition of savage and civilized society; which lays the foundation for the superstructure. In the one stage of society, nervous diseases

have not been known; and in proportion to the advanced stage of the other, they will be found to prevail; and to increase and extend as their causes become general. This history, taken from actual observation among mankind, if it is correct, as I conceive it to be, will give the application of the doctrine to the *treatment and cure*, a decided superiority over all its predecessors. This has been daily exemplified in the practice. For instance, when consulted by a delicate female, for various sexual complaints, indigestion, and many nervous ailments, if I find she is descended from gouty parents, I shall soon learn, that she possesses the character of the nervous temperament, in an exquisite degree. The treatment, therefore, must turn upon correcting those causes which act on the predisposition; such as passions of the mind, diet, air, exercise, &c. and along with these the use of such medicines as tend directly to strengthen the digestive powers, and to soothe the nervous influence, which, by sympathy, is extended over all the suffering organs.

But an appeal to the *ruling temperament* is of still more value in the *prevention* of

these diseases, which depend on a peculiar trait of constitution. As a habit of body once confirmed, is difficult to be changed in a grown-up person; so this knowledge teaches us to begin in infancy, with our rules for meliorating the general frame: and if we cannot entirely supplant natural infirmities, we at least lessen them.

The gout is one of the most painful maladies incident to human life: and as the subjects of it are commonly persons of fortune, or of better condition, so a great reward has been held out to the physician who shall devise a successful plan of cure. This appears to be the very reason why more pretended remedies have been published for gout, in different ages, than for any other disease. But it has so happened that these *panacea* have never come from the hands of any eminent physician; but from empirics of the worst description. The intelligent medical philosopher will always be diffident of the powers of his art, in the cure of *arthritis;* because he knows it to be a disease of the original, or acquired temperament: and that though it may now and then be expelled by some active agent, it will again recur; for the

action of remedies can only last for a given period: they cannot change the whole frame by their operation. This has been the constant tenor of all popular medicines for gout; and it will continue to be the fate with all that are yet to come. The trials of the French *nostrum* called *L'Eau Medicinale d' Husson*, which have been recently made in England, amply confirm what I have just said. This compound acts as a most violent purgative, causing such dejections by stool, as are produced by no other article. But from what I have seen and known of its operation, I am of opinion, that it is the last medicine that ought to be tried in a gouty constitution: indeed its credit can only remain in the hands of desperate adventurers.

But it is not to gout only, that this mode of reasoning applies: it extends to all the diseases of the temperament. One train of symptoms may disappear for a time; but unless something has been done by way of *prevention*, another concourse of complaints will succeed, as certainly depending on the original predisposition, as the preceding. It was said the "*Portland Powder*," changed the gout to apoplexy,

palsy and dropsy. This could not be called a cure: it only aggravated the temperament, and induced a worse disease. I have known a severe degree of intoxication, from wine and ardent spirit, supplant gout, almost instantly. But what was the consequence? Painful nervous and stomach affections soon supervened; and in their turn were to be expelled by the same means, till the constitution was destroyed; and life terminated at 36, which under other circumstances, might have been prolonged to 70. The Portland Powder was composed of strong bitters, and its use directed for the space of twelve months. In my own practice I have never seen any harm from bitters; because I employ them in a way to obtain all their good effects, and to guard against their hurtful qualities. When judiciously combined, occasionally suspended, and modified in prescription, and alternated with other articles, they become the most valuable class of medicines in these diseases. The exhibition of Peruvian bark, and many other articles of *materia medica*, must be attended to in this manner, if we are to obtain all the benefit they are capable of producing. I am of

opinion, that the action of these medicines begins on the nerves of the stomach: for if their pharmaceutical treatment is adapted to the case, we soon find the digestion improve, the bowels become regular, the bile flow in due quantity, the urine change to a more healthful aspect and freely voided, head-aches subside, the breathing becomes soft, the skin open, the sleep sound and refreshing; and with these, the mind grows active, and the spirits rise. An advance to this degree of improvement, will often indicate the use of iron to confirm health: and its various forms require as much care and discernment in the selection, as the other articles: for one of its preparations may do harm, when another will accomplish the cure.

The cure of chronic diseases, I believe, is most often successful, if we can improve the condition of the stomach. For its sympathy with the nervous system in general, and all important organs of the body, is so great, that the first step to health, is growing appetite and easy digestion. In old age, in particular, this fact is confirmed by daily observation. When the appetite of an aged person fails, and the bulk of the

body shrinks, or should emaciation to a certain degree take place, such a state of health is not improved without difficulty: but the best plan will be to support the digestive powers, by exciting desire for food; thus affording strength and nourishment to the body, and leaving the issue to nature.

The merit of this work, as a "VIEW OF THE NERVOUS TEMPERAMENT," consists in the confidence which is held out by rules of *prevention;* as the precepts here delivered, come home to the feelings of every sufferer, and are intelligible to every reader. I well know the fallibility of all medical reasoning on the *cure* of diseases. We may command the resources, but who among physicians, can secure the success of his art?

In the preceding part of this View, I have cursorily mentioned the disease called

HYDROCEPHALUS ACUTUS;

Or, Internal Dropsy of the Brain.

A disease under this designation has been treated by different physicians, for

the last sixty years. But though its history has been considerably enlarged, the exact condition of body, and a method of cure deduced therefrom, are still desiderata in the healing art. These will at once be my apology for introducing the subject into a view of the nervous temperament.

The most prevailing opinion at present is, that it occurs in the scrophulous habit. But even if this were admitted, it throws no light on the production, or cure, of the malady. The effusion of a fluid, resembling that of other dropsies, into the ventricles of the brain, has no analogy with the general appearance of scrophula; and the symptoms attending have still less. That the disease has been often seen in scrophulous families, will be allowed: but that it is confined to this habit of body, I am not disposed to admit.

It is much to be regretted, that the earlier writers on the disease, should ever have called it by the name of dropsy. The incurable nature of it was at once assented to by some, because absorbent vessels had never been discovered in the brain, and therefore the effused fluid could not be taken up. But, in the progress of inquiry,

it has been confirmed by dissection, that the same concourse of symptoms has been known, where no lymph was found in the ventricles after death. And again, the ventricles have been found inundated ; and yet the fatal disease had exhibited none of the characteristics of *hydrocephalus*. These facts soon gave birth to doubts on the hydropic affection being the radical cause of the phenomena, and increased action of the vascular system within the cranium, with a tendency to inflammation in the sensorium itself, was next resorted to as the cause. This doctrine too has only been partially supported : and later writers would seem to attribute the whole to some derangement in the stomach, liver, and bowels.

Ever since I considered myself capable of thinking impartially on medical subjects, I have been dissatisfied with the opinions and practice of physicians in this disease ; and the experience of every case which has come under my care for the last fourteen years, has more and more confirmed me in the opinion that the whole phenomena, from first to last, are *purely* nervous symptoms ; and to be traced to that

state of predisposition, to which I have given the title of *nervous temperament.*

Hydrocephalus internus has been classed as an acute disease, in opposition to the more chronic form, where the bulk of the head becomes enormous from the gaping of the sutures, and the lymph being effused on the surface of the brain. If the term *acute* is to be considered correct, because it commences with a febrile accession, I think very differently. The tremors, shiverings, increased heat, and quick pulse, to be met with here, are no more febrile symptoms than where they appear in other nervous affections. They want all the regularity, which strictly speaking, constitutes a febrile paroxysm: they occur at all times of the day and night, and their duration is uncertain. The infant labouring under the external form of hydrocephalus, seldom feels much uneasiness, and nervous symptoms, such as convulsions, do not often appear till near the close of the scene, and sometimes not even then. This is a proof that the mere bulk of water compressing the sensorium, has but a small share in producing violent movements of the ner-

vous power, without the aid of predisposition.

This disease is chiefly known in infancy. The exceptions to this general rule are few. The period of infancy is marked by great irritability of the nervous system; much mobility of muscle; quick circulation of blood; and a disposition to diseases of the alimentary canal, and subservient viscera. All these are parts of a nervous temperament; which, if derived from father or mother, will, even at this period of life, give a more decided character to the predisposition.

The disease has been observed to run in families. This is a well known fact; because more than one child have died of the complaint. I have known many instances of this kind myself. Here is a strong proof of an hereditary disposition: in all these cases, there was a nervous temperament on either the father or mother's side; and in some of them, on both sides. The children of such parents die in great numbers in infancy: they are prone to convulsions; to violent attacks in the stomach and bowels; and often die suddenly without much previous indisposi-

tion. Wherever this temperament is found, there may be observed, in the mind, rapid transitions of thought; quick and irritable passions: and in the body a peculiar tendency to disease in the first passages, from slight causes.

Dr Quin, in his inaugural dissertation, *de hydrocephalo*, Edin. 1777, is the first who speaks of inflammation in the brain being the precursor of the disease. Other physicians since that period, have supported that opinion: but my own experience affords a very different result; and it is well known, that such affections of the digestive organs as accompany this complaint, are not seen in phrenitis.

My attention to this disease, was first excited by a child of about three years old, the son of my servant, fourteen years ago. During my attendance, I was seized with a severe pectoral complaint, from exposure to cold in boats, that confined me to my room for some days. In the mean time, all the symptoms of extreme danger appeared in the boy, and no hope remained. The squinting to an unusual degree, the dilated pupil, one eye fixed, convulsions, &c. indicated approaching death. I desired the

father to request the attendance of one of my friends in Plymouth dock, who visited the child, and considered it past all recovery; and therefore ordered nothing. Two days after this I was able to quit the house: the child was still alive, and could swallow a little wine and water. I proceeded in the treatment with which I had begun: the bowels were again briskly emptied by rhubarb and magnesia: and followed up by bark and magnesia, &c, in the most suitable forms. The condition of the child was quickly changed for the better, and he recovered. It may be said, that in this case, there was no effusion in the brain, and therefore recovery took place. But if such a mode of reasoning is to be admitted here, it must hold good in all other diseases where danger is apparent; and the whole practice of physic be of very negative utility. My indications of cure from the first, were directed solely against the symptoms of uneasiness in the first passages, without the least reference to the head-ache, or the state of the pulse. I knew the father to possess the nervous character in a high degree; and I con-

cluded, this also was the temperament of the son.

I am aware it may be argued, that worms might produce all these symptoms. But then will not this go a great way to decide the question, namely, that the symptoms of *hydrocephalus internus* are exactly the same, in every stage, with disorders of the alimentary canal. Worms, and other nervous affections, produce headaches much like this disease: and strangury so called, is a common attendant of the whole. From the general appearances of the brain in infancy, as noted by anatomists, there is some reason for believing, that effusion is more common, in many diseases of that age, than has been usually thought by physicians. The fluid found here, I therefore consider as invariably the *effect*, not the *cause* of indisposition.

It is certain that this disease is of more frequent occurence than in former times: and this, I consider some additional proof of the charactet which I wish to assign it. If therefore there is any validity in my arguments, it will continue to increase; and will keep pace with the increasing prevalence of nervous disorders.

Since I last resided in Newcastle, I have seen seven fatal cases of the disease in question. These were all in the stage of danger when I was called in: and in the whole number, I was satisfied from my inquiries, that they belonged to families strongly marked by the nervous character.

Within the last twelve months, I have been consulted for five cases in the early stage of the complaint, that appeared to me as strongly indicating hydrocephalus internus, as were ever mentioned by writers. Some of the number exhibited signs of danger, such as the frequent convulsions, the insensible pupil, and one of them a partial strabismus. They all recovered, after a practice founded on the doctrine given in these pages. I have at present a boy of nine years of age, that I now consider convalescent, after having had many fits of general convulsions. In these cases too, I have been satisfied the predisposition was purely nervous.

The method of treatment in this complaint, is a strong proof of the presumption and imbecility of medical reasoning on a doubtful disease. In the practice of some, is to be seen a compleat course or routine

of the whole *materia medica :* and in a few cases, it is difficult to say, whether the disease, or the medicines given, destroyed the infant. A melancholy instance of this kind is recorded in a popular medical journal of the present day, from the West Indies, where mercury was exhibited by a near connection of the patient.

I admit with others, the propriety of active purges in this disease, and even at times, one of mercury. The bowels, it is allowed, are loaded with offensive matter that must be evacuated: but the task of medicine does not end here. The character of these nervous affections is remarkable for the quick migration, if I may so call it, from one organ to another, of the diseased feeling. It is in the head, face, eyes, ears, throat, lungs, heart, diaphragm, stomach, liver and ducts, intestines, kidnies, ureters, bladder, sexual organs, and every muscle, perhaps, in the space of a few hours ; so exquisite is the sympathy, so rapid the transitions. Yet in the whole of these changes and migrations, from organ to organ, the radical disease is still the same : and it exists in the nervous system as the fountain of sensation. When there-

fore, the bowels are loaded with offensive matter; the contents of the stomach vitiated by depraved gastric juice and mucus; the liver and ducts impacted with retained and inspissated bile; what is to be considered as the cause of all these derangements, but a diseased feeling, or the absence of healthful action and sensation, in the primary ruling power, or nervous influence of the different organs? A brisk purge will for the time carry off this colluvies: but if you do not correct the diseased energy of the nerve, you must purge again: but take care that your active purges do not sweep life away with them.

Here is the point in practice, in which I conceive I differ from those physicians who contend for a purgative plan of cure, and nothing beyond it. The purpose of this doctrine of temperament, is to look to the bottom. To the physician who has seen these affections on a large scale, must have often been noted the numerous painful symptoms which arise from acidity of stomach. This acidity is not to be considered as only the relict of imperfect digestion, and a fermentative process in the food: it is connected with a diseased con-

dition of the glands and follicles which separate gastric juice and mucus; and these parts as pouring out depraved fluids, to be cured, must be changed in their action. The same mode of reasoning, applies to the system of the liver: first, let its ducts be emulged by an active purgative; and then correct the condition of the hepatic system, by medicines which act immediately on the stomach, and which by sympathy will be soon extended to the liver. In the execution of this part of practice, I have often seen great mistakes committed. In people called bilious, a long course of mercurial purgatives, will so derange the different fluids poured into the alimentary canal, that they will turn to a black and pitchy looking substance, which too often encourages a repetition of the purge; whereas, a medicine directed to the sympathising nerves of the stomach would soon put all to rights. Instances of this kind, which I have seen, are innumerable. Here the effect was taken for the cause; and an effort of cure converted into an engine of torture, and perhaps of death.

In this attempt to engraft the *pathology* of hydrocephalus internus on the nervous

system directly, I feel myself justified by observations made in a great variety of cases. The disease itself, is still considered a dangerous one; and the opinions of physicians on its nature and treatment, are alike fluctuating and uncertain. Should these animadversions contribute to clear the doubts which obscure the proximate cause, and assist in furnishing rules for a more successful method of cure, they will be matter of great satisfaction to me.

FINIS.

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